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A USAF F86A Sabre jet unleashes its missiles over Korea. The Sabre did constant battle with the Communist MIG15 for control of the Korean skies. Next month's WAR MONTHLY describes the new tactics demanded by MACH-speed combat.

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The 'Moaning Minnie' had simple beginnings, but became a highly accurate and feared multiple rocket mortar

Few Allied infantrymen or gunners of World War II re- quickly saturate a target. So these various lines of thought minisce for long before mentioning 'Moaning Minnie' or 'Screaming Mimi' in terms of loathing and respect. Earning these nicknames in North Africa, the Nebelwerfer multiple 'mortar' made itself the land equivalent of the Stuka divebomber in the latter half of the war thickening out sparse German artillery barrages with its own shrieking projectiles. Cheaper, lighter and simpler than conventional guns its awesome firepower to some extent compensated for Germany's inferiority on three fronts.

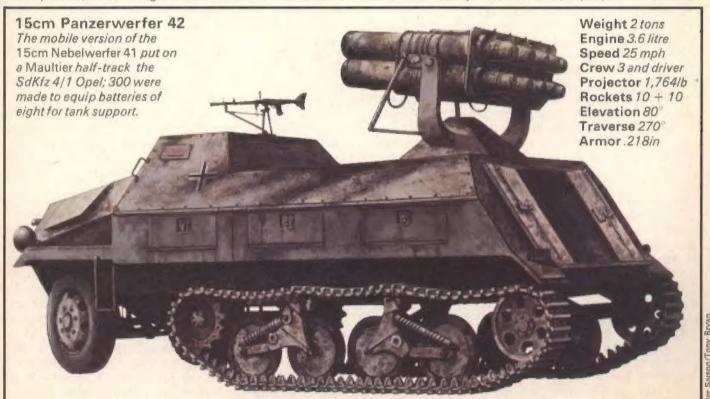
When Hitler began re-arming the German Army in 1934, one possible weapon prominent in military thinking was poison gas. Now, strange as it may sound. Hitler was very much against the use of gas, reputedly because of what he had seen of its effects during World War I. But, like most military leaders, he was apprehensive of its use by other people and he adopted the universal attitude; 'We do not intend to use it, but we had better be prepared to retaliate in case someone else uses it against us."

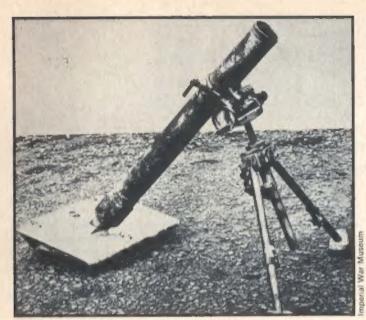
A World War I lesson was that one of the most reliable and efficient methods of delivering gas on to its target was by using trench mortars, since the bombs could carry a higher percentage of their weight in gas than could artillery shells, and the high rate of fire of the mortar could

came together in 1935 with the formation of new units in the German Army called Nebeltruppen (Smoke Troops) armed with a mortar called the 10cm Nebelwerfer 35 (Smoke Thrower). There was a certain amount of honesty in the title, since one of the tasks of these troops was to fire smoke bombs to form screens behind which the infantry could attack. But there was a large amount of security smoke-screen about the name as well, since the smoke troops' basic purpose was to fire poison gas bombs. In all fairness it should be said that most other major armies did the same thing, outfitting special 'Chemical Companies' with mortars, ostensibly for smoke-screening, actually for gas warfare.

So the original weapon to be called a Nebelwerfer was no more than a plain and simple trench mortar, a scaled-up 100mm version of the standard 1934 80mm infantry model, firing a 1631b bomb to a range of 3,300 yards. As mortars went it was good enough, but in some quarters it was felt that in view of the specialist tasks to be performed more range would be welcome, and a fresh design was put in hand in 1938.

The only way to get more range was, of course, to build a heavier and more powerful mortar, a process which intro-





The first Nebelwerfer, 100mm upscaling of the 80mm infantry mortar for firing smoke and gas bombs. Twice the weight it needed a five-man crew and a small hand-cart.

duces a lot of complication into what ought to have been a simple weapon. These complications took time to design and build, and the new model, the 10cm Nebelwerfer 40, did not arrive in the hands of the Nebeltruppen until late 1940. Compared with the 1935 model, the new mortar had a much better performance, throwing a 19lb bomb to a range of 6,775 yards; but it paid for this in weight and awkwardness. Instead of the NbW35's all-up weight of 231lb, the NbW40 turned the scale at 1,708lb, had a wheeled carriage, a recoil system, elevating and traversing gears, and was breech-loaded. It was a triumph of the gunmakers' art, a good deal more popular with the designers than with the soldiers who had to use it.

But it did not really matter, because by the time the NbW40 began to arrive, a far better weapon was about to begin production. No sooner had the Nebeltruppen begun to hand their NbW35s over to the infantry and take delivery of the NbW40, than they began to get rid of them in favor of a new 15cm Nebelwerfer 41 model. And if the NbW40 had been a big change from the NbW35, the NbW41 stepped into a completely new sphere of armament. For although it had the same designation, this, again, was a security cover; the Nebelwerfer 41 was not a mortar at all, it was a rocket launcher.

This new weapon had been a long time in the making, having begun as a sideline in the Rocket Research Station of the Army Weapons Office at Kummersdorf. In 1930 the German General Staff had spotted a loophole in the Versailles Treaty; they were effectually forbidden to develop heavy artillery but there was nothing said about rockets. The Rocket Research Station was set up to take advantage of this, and one of the projects handed to them was the development of a bombardment weapon with a range of between three and five miles. In later years their primary interest became the perfection of liquid-fuel rockets, culminating in the famous V2 rocket, but they also did a lot of fundamental research into rocket ballistics and solid fuel motors.

One field of investigation was the question of stabilizing rockets by spinning them, rather than using the more

usual fins. This system had been pioneered by the British Army's 'Hales War Rocket' in the 1870s, and then followed up by the Swedish inventor Baron Unge, but nobody had much faith in the idea and it had lapsed into the limbo of forgotten weapons. The Kummersdorf team, under the guidance of Colonel Walther R. A. Dornberger (and probably with some assistance from Dr Wernher von Braun, another Kummersdorf luminary) looked afresh at the spinstabilized rocket and perfected a new design. The drawback with previous models, such as Hale's, was that the thrust was produced at the tail-end of the rocket which tended to push the nose off course if the motor burned at all erratically, which it often did with the early, rather primitive, solid gunpowder propulsion. The rate of spin had not been scientifically worked out to give the best results.

Dornberger's men changed all this. Their first move was to put the rocket motor at the front of the assembly and place the explosive-carrying section (what is usually called the 'warhead' but in this case might well have been called the 'wartail'), behind it. The rocket blast exhausted just behind the mid-point of the assembly, in front of the center of gravity, so that the rocket was now pulling the payload instead of pushing it. The sort of argument in favor of this arrangement would be familiar to supporters of Citroen and Mini cars with their front-wheel drive. Instead of a simple jet pipe, the rocket blast was released through a ring of 26 venturi tubes surrounding the rocket body. These venturis were canted at an angle of 14° to the axis of the motor so that their thrust not only propelled the rocket but has sufficient angular velocity to generate a rapid rate of spin. The result was one of the most accurate small rockets ever made, and the next task was to ally it to a suitable launching device and so turn it into a practical weapon.

The 1,195lb launcher was relatively simple; a cluster of six tubes mounted on a light, split-trail carriage with two wheels, originally designed for the infantry's 37mm PAK36 AT gun. The rockets were loaded into the tubes, their jets level with the back end of the tubes and the explosive sections protruding. Wire leads came from an electric igniter inside one of the venturis, and these were clipped to terminals alongside each tube. A remote lead was plugged into the control box on the launcher, and on the other end was a selector box and a magnetic-firing unit. With the launcher loaded the detachment took cover 10-15 yards away so as to be clear of the blast and the operator spun the magneto handle. Current flowed through the selector into the rocket igniters and the six rockets were discharged either singly at will or in an automatic volley at two-second intervals so that the flight of one rocket did not disturb the launch of the next.

Having got this package together, the next problem was to sell it to the Army. In spite of the General Staff having ordered it in the first place there was a certain amount of customer resistance. The rocket had been in and out of European and American military service for over 130 years by this time, but even the most partisan military historian had to admit that apart from starting a few spectacular fires, its impact had not been very great. The rocket's history was that of a temperamental weapon with no great claims to accuracy or reliability, well summed-up by a prominent British artifleryman in the 1860s: 'If the rocket had come first, what a marvellous improvement we would have considered the cannon!' With that sort of reputation to overcome, the German Army were going to take a long and hard look at any rocket on offer.



But the Kummersdorf invention lived up to its advance billing. The launcher fired six 150mm (5.9in) rockets of 76lb each carrying 5.62lb of high explosive, to a maximum range of 7,545 yards (4.28 miles). It could be quickly reloaded in 90 seconds so as to be able to fire three six-round volleys every five minutes, each barrel firing separately to avoid overturning the carriage. The accuracy, while not that of a gun, was certainly better than any other rocket had achieved and it was better than most mortars could manage. Technically there was no valid objection to the new weapon; the only question which arose was that of manpower. Where were they going to find the men to operate them? Even the German Army had manpower problems.

By this time the NbW35's shortcomings were obvious, and those who had seen the NbW40 prototypes were far from happy. And putting two and two together, some unsung hero came up with the Army's answer; make us a smoke rocket as well as the HE model and we will give it to the Nebeltruppen. A smoke rocket was quickly produced and in May 1941 the 'Nebelwerfer D' (for Dornberger) was authorized for issue, just in time for the Russian campaign. In early 1942 it had a change of name and became the 15cm Nebelwerfer 41.

The Nebelwerfer, as employed by the first three mortar (Werfer) regiments (51st, 52nd and 53rd), was highly successful on the Eastern Front and the Germans managed to keep it a secret for a surprisingly long time. Russian soldiers frequently reported a strange new weapon which fired shells making a peculiar shrieking noise as they passed overhead, and there were some awe-stricken rumors flying

Loading the 15cm Nebelwerfer 41. The last two barrels are being loaded starting at the bottom. Rocket allocation per launcher was 72 HE and 18 smoke, 25 minutes rapid-fire.



about. Several German veterans of the 1941 campaign remain convinced that the NbW rockets of those days were charged with a liquid-oxygen explosive which had a devastating effect; they may be right, though there is no documentary confirmation. Eventually, at the capture of Velikiye-Luki in January 1943, the Red Army captured some Nebelwerfers with some ammunition and the secret was out. Since the Soviets were already using rockets of their own, the discovery that the German mystery weapon was, after all, just another rocket, went a long way towards dispelling some of the more fanciful rumors.

Problem of concealment

On 6 March 1943 the 71st Werfer Regiment supported Field Marshal Erwin Rommel's disastrous tank attack on the Eighth Army at Medenine in Tunisia. Personally brought forward by Oberstleutnant (Lieutenant Colonel) Count Claus von Stauffenberg, later organizer of the Bomb Plot against Hitler, the regiment's three batteries were rapidly knocked out by British fighter-bombers. Concealment of Nebelwerfer launchers was their principal drawback. One third the weight of a conventional field artillery piece, a Nebelwerfer kicked up dust being fired and frequent changes of camouflaged positions were needed to avoid retaliatory fire.

Shortly after this the British Army captured their first Nebelwerfer. During the Tunisian campaign it did not make the same impression as in Russia. A British report in May 1943 said: 'Reports of this weapon in battle speak of it as noisy but having only limited fragmentation and blast effect, and state that no effects have been felt by a man standing 60 yards from the burst.'

In spite of such a derogatory opinion, the Germans were convinced that the Nebelwerfer was a worthwhile weapon, and in their usual fashion set out to develop a bigger and better version. This was the 21cm Nebelwerfer 42, authorized for issue on 30 June 1943. This had a cluster of five launch tubes mounted on the same carriage as that used for the NbW41 model, and it fired a rocket weighing 242lb, of which 22.4lb was explosive, to a range of 8,585 yards (4.8 miles).

The rocket was a considerable change from the earlier model and there had been less time for careful design and detailed evaluation than with the 150mm rocket. The 21cm Wurfgranate adopted the quick and simple solution of putting the rocket behind the warhead. The accuracy was not quite as good as that of the 150mm, but it was still good enough for an 'area weapon', and by 1943 it was bangs on the ground which counted, not theoretical considerations of perfect stability. In Italy at Salerno in September, 71st Regiment had both Nebelwerfer models, which it was also to use with great effect at Cassino. With the arrival of the NbW42 new formations called Werfer brigades were formed, each containing one medium and one heavy regiment to give a total of 384 15cm and 325 21cm barrels. According to one German document a medium regiment could launch 476 rockets in five seconds, dropping a weight of about six tons of warheads on to the target, the equivalent in firepower to 81 batteries of field howitzers.

The Werfer regiments were next given more mobility by the adoption of the 15cm Panzerwerfer 42 auf Selbstfahrlafette, or self-propelled Nebelwerfer. A special 10-tube cluster was fitted on top of an armored semi-tracked 2-ton Poel 'Maultier' ('Mule') vehicle. A three-man crew and a driver took the Panzerwerfer into action with the 10 tubes

loaded and another 10 rockets stowed inside. Since the operators could shelter inside the vehicle instead of having to take cover at a distance, it was quicker to re-load and fire. On 5 February 1944 56th Werfer Regiment had 27 15cm, six 21cm and eight Panzerwerfers to employ against the Allied Anzio bridgehead in Italy. The vehicle became an authorized standard equipment in May 1944.

It was in Normandy during June-August 1944 that the Nebelwerfer really became respected by the Western Allies. A British Army casualty research report of 30 July stated that 70 per cent of infantry losses since D-day had been due to mortar-fire (infantry mortars and Nebelwerfers) and that some infantrymen would put the percentage still higher. The close hedgerow country was ideal for Nebelwerfer concealment when deployment always had to be within five miles of the front-line.

Three Werfer brigades (five regiments) fought in Normandy, all on the Caen (British) sector. Commanders facing the Americans appealed in vain for Nebelwerfers. There were not enough to go round and compensate for the lack of German artillery and massive Allied firepower. Col. Tzschökell's 7th Werfer Brigade (83rd and 84th Regiments) fired 8,000 tons of ammunition, notably onto Hill 112 in support of its recapture by Panzers on 30 June. On 18 July British tanks actually ran over Nebelwerfers in an abortive breakout effort against defenders using 272 launchers camouflaged in villages and cornfields east of Caen.

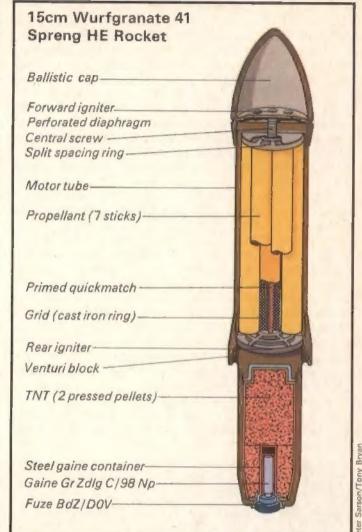
One-shot demolition device

The next Nebelwerfer to be produced was the 28/32cm NbW 41. In spite of the dating it actually appeared late in 1943, and, as the title implies, could launch rockets of either 280mm (11in) or 320mm (12.6in) calibre. It consisted of six cage-type launcher racks instead of the solid-walled tubes of the earlier models, mounted on a simple two-wheeled trailer. The launcher rails were dimensioned to take the 32cm Wurfkorper Flamm, an enormous but slightly primitive rocket which had originally appeared in 1941 as a one-shot demolition device. Weighing 174lb it consisted of a motor unit and a bulbous warhead loaded with 88lb of a petrol/diesel oil mixture together with a magnesium igniter.

The Wurfkorper had first been supplied in a combined carrying-crate-cum-launcher which was laid on the ground, elevated by a pair of folding legs under the front end, and fired electrically. Later a simple frame was provided, into which four crates could be clamped and wired up to allow firing a volley. It had a maximum range of only 2,405 yards, but for dealing with pillboxes, bunkers and machine-gun posts this was quite sufficient and the inflammable filling gave an impressive result at the target.

Now the Wurfkorper Flamm was adapted to a Nebelwerfer role; and in order to provide an HE capability, the 28cm Wurfkorper Spreng, a similar one-shot rocket carrying 110lb of HE was taken into use. To allow firing the smaller-diameter HE rocket a set of adapter rails could be slipped into the launcher, and with these in place the 280mm rocket could be delivered to a maximum range of 2,160 yards.

While these two rockets were efficient, their short range was a drawback, and the research department set to work to produce a heavyweight rocket with a reasonable range as a replacement. The result was the 30cm Wurfkorper Spreng 42, in which the aerodynamics had been closely studied with the result that it could reach 7,100 yards (4.03 miles). The basic layout was the same as that of the 280mm and 320mm rockets, a heavy warhead pushed by a solid-fuel



This rocket not merely had the warhead in the tail but burnt the candle at both ends. The forward and rear igniters when fired electrically by an ERZ39 initiator inserted in any of the 26 exhaust outlets (venturis) burnt 7 diethylene glycol dinitrate sticks from both ends via the primed celluloid tube. This ensured a rapid and smooth rate of burning for up to 20 seconds. Furthermore having the warhead behind made sure that the steel motor unit casing was added to the rocket's shrapnel effect. The 36.4in rocket with its 13lb of propellant was delivered in a wooden box, the lid having the initiator clipped under it. Casing color was dark green with white and black stencilling.



The aerial 21cm Nebelwerfer on a Me109G6/R2 'Pulk-Zerstorer' ('Formation Destroyer'). Three sub-types of the Me109G, four of FW190A and three of Me110 twinengined fighters used it from August 1943. Deviation was 23ft vertically and 130ft horizontally at 1,093 yards. Messerschmitt Ar

motor at the rear. The improvements were due to a better ballistic shape and a more efficient motor which was, in fact, practically the 210mm motor in a slightly altered casing. To launch this 277lb-missile a new Nebelwerfer was produced. This was little more than the open-frame 28/32cm model with the launcher rails fitted to the new rocket. Two rows of three launchers were mounted on a two-wheeled trailer. These large models used ordinary trailer chassis for their mountings. They did not go to the trouble of split trails or other gun-type configurations as had the early models, an indication of how tradition had still influenced the early designers and how experience rendered such refinements quite unnecessary.

German pioneering of spin stabilization was the stimulus for similar experiments in Britain and the US, resulting in the American spun M16 rocket, virtually a copy of the German 21cm model. Britain produced a highly efficient 60mm (2.36in) spun rocket fired from a magazine-fed launcher at a rate of 100rpm, but by the time development was completed the war was over and the idea was dropped. It was originally intended as an infantry weapon, but it was later proposed as an armament for fighter aircraft. By a strange coincidence, a similar 60mm spun rocket for aircraft use had been developed by the Kummersdorf team before the war, but this had been turned down by the Luftwaffe as too small to be worthwhile. Perhaps so, but it opens the door to a little-known application of the Nebelwerfer.

Late in 1943 a Luftwaffe major appeared in Gen. Dornberger's office to ask if it was possible to mount the 210mm Nebelwerfer rocket underneath a fighter aircraft. His idea was to fit the rocket with a time fuse and fire it into a forma-

tion of bombers so as to make them break formation and disperse so that they could be more easily picked off by conventionally-armed fighters. In a matter of hours a design had been drafted out and the major sent back to his squadron with four launch tubes taken from a Nebelwerfer and a supply of rockets. An aircraft was fitted up and test firings took place, with the result that it was taken into Luftwaffe service as the 21cm Bord-Rakete. Two launchers were fitted to FW190A4 fighters (and later several other types), one tube beneath each wing. The new armament saw large-scale operational use by single and twin-engined fighters in the celebrated first USAAF raid on Schweinfurt (17 August 1943). The only defect was that since each Pulk-Zerstorer ('Formation Destroyer') aircraft only carried two rockets (98lb warhead). The choice was between a large number of rocket-equipped fighters or the constant re-arming of a few. And there was a reluctance to arm more fighters since the drag of the exposed launcher tubes degraded aircraft performance.

In January 1944 a solution to this problem was found. Six 210mm launcher tubes were mounted on a central spindle and fitted in the nose of a Messerschmitt 410A1 fighter. A cowling concealed most of the assembly, and a groove in the under-surface of the aircraft lined up with the lowest tube of the launcher unit. After firing one rocket the launcher assembly could be turned on its spindle to line up the next tube with the groove, so that the aircraft now had a six-shot capability. Plans were even drawn up for carrying spare rockets and reloading in the air, but before the development was completed the war ended and the 'Flying Nebelwerfer' never saw operational use.



Jundesarchiv

BATTLE FOR BERLIN

Nothing but courage stood between the defenders of the doomed and burning capital and the approaching Red Army



In all the talk that went on in the least months of World War II about strategy and objectives and partitioning Europe, one vital point was overlooked by everyone. It was that the only military objective whose capture or elimination could actually bring the war to an end lay in the person of one man—Adolf Hitler. It was Hitler's will alone which kept the German people on their dreadful path to destruction. He had made his intention clear to his generals on the eve of the Ardennes offensive in December 1944: 'We must allow no moment to pass without showing the enemy that, whatever he does, he can never reckon on a capitulation, Never! Never!' Indeed he had already said it countless times—in 'Mein Kempf' and in his endless table talk years before:

'We shall not capitulate—no, never. We may be destroyed, but if we are, we shall drag a world with us—a world in flames.'

The battle for Berlin turned this reckless prophecy into the reality of Götterdämmerung. Albert Speer, technocrat, and Minister of Armaments and War Production, described the helplessness to which Hitler's miscalculations had reduced the once mighty Reich: 'Howling and exploding bombs, clouds Illuminated in red and yellow hues, droning motors and no defence anywhere—I was stunned'.

Before 1945, when it was hard to see how it could be done, both the Russians and the Western Allies had repeatedly named Berlin as their goal. But such definitions made little





While the US armies halted on the Elbe, the Russians broke through a threadbare German front to encircle and capture Berlin in just over two weeks.

□ VArmed with a PPSH 1941 7.62mm submachine-gun, this infantryman wears the 'Order of the Patriotic War' First Class on his right breast.

sense unless it was possible to make a proper plan to capture the city. This was not feasible until the beginning of 1945. Once the Wehrmacht had at last recognised that there was nothing left but a strategy of defense, in the East on the Vistula and in the West on the Rhine. Once Germany itself was on the point of being invaded, that is in January 1945, the battle for Berlin-then only a few hundred miles away from each main enemy army-was on.

Planning the final battle of the war began in the Soviet High Command in October 1944. It was intended to advance from the Vistula to Berlin and beyond in six weeks. The offensive was to start on 20 January 1945. Later the date was brought forward to 12 January. Three army groups or 'fronts' were to attack-1 st and 2nd Belorussian commanded respectively by Marshals Georgi K. Zhukov and Konstantin Rokossovski, and 1st Ukrainian under Marshal Ivan S. Koniev-21 million men against fewer than a million Germans. The Russians' material superiority was even greater. When the attack started it had immediate and startling success. The Eastern Front collapsed, as Colonel General Heinz Guderian, Chief of the German General Staff, had forecast, like a house of cards. By early February the Red Army had reached the River Oder opposite Berlin. They were only 40 miles from the city. Here they paused.

'Who is to capture Berlin?'

Why did Stalin not push on after his first brilliant success? Was it simply that with Berlin virtually in the bag he wanted to get his hands on as much of SE Europe as he could? Still more interesting is the question ne put to his generals: 'Who is to capture Berlin, we or the Allies?'-and this at a time when it had already been agreed with the Americans that they would halt their armies well to the west of the city.

Zhukov maintained that because of so many casualties to men and equipment suffered during the January battles, difficulties of supply and air support, as well as the German counter-attack capability, further advance was impossible. Colonel General Vasill I. Chuikov, on the other hand, commanding 8th Guards Army under Zhukov, claimed that the war could have been ended in February. He also recorded that when on 4 February the advance on Berlin was being discussed, Stalin telephoned Zhukov and told him to halt the advance on the city and attack the German forces in Pomerania instead.

The result was that the final thrust on Berlin did not start until 16 April. Broadly, Zhukov was to take the city while Koniev would cut off the German Army Group Vistula from Berlin and secure Zhukov's southern flank. Zhukov had no illusions about the problems facing him: 'The unusual and highly complex offensive against Berlin required the most careful preparation at all front and army levels. Troops of the 1st Belorussian front were expected the break through a deeply echeloned defence zone extending from the Oder River all the way to heavily fortified Berlin. Never before in the experience of warfare had we been called upon to capture a city as large and as heavily fortified as Berlin. Its total area was almost 350 square miles, Its subway and other

widespread underground engineering networks provided ample possibilities for troop movements. The city itself and its suburbs had been carefully prepared for defence. Every street, every square, every alley, building, canal and bridge represented an element in the city's defence system.'

Yet four days after the attack started, his artillery opened up on Berlin and on 21 April the leading troops of three armies. 3rd Shock. 2nd Guards Tank and 47th broke into the outskirts of the city. The last phase of the battle had begun. Eleven days later on 2 May, General Helmuth Weidling, Berlin Commandant, surrendered, it was all over The battle between 16 April and the German capitulation had cost the Red Army a terrible 300,000 casualties.

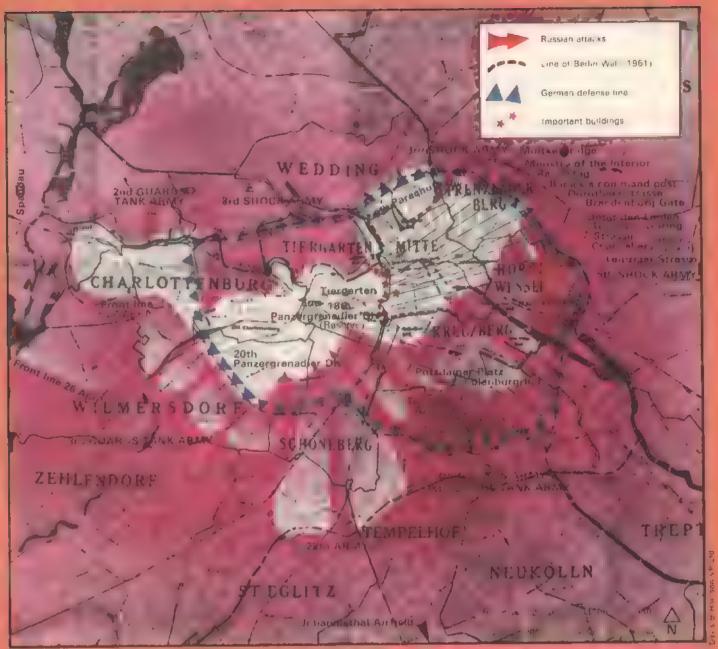
'How pitiful is their Berlin I' announced Marshal Zhukov after his troops had captured it. It was the Red Army and Allied bombing which had made it so. Yet the courage and perseverance of the Berliners themselves should not be forgotten. The long road to Berlin had cost the Russians 20 million men since that day almost four years earlier when the two great armies had clashed head on. And all of it had been brought about by the man who at the height of the fighting for Berlin conducted, or thought he conducted, the battle which he claimed, would cause the Russians to suffer their bloodiest defeat.

That it was the Russians and not the Americans who reached Berlin first was because of decisions and actions taken during the first two weeks of April 1945. Lieutenant General William H. Simpson's US Ninth Army crossed the

Elbe astride Magdeburg on 12 April, and reached Tangemunde—only 50 miles from Berlin. The Russians' next offensive was not planned to start for another four days, 16 April, and they were at this time 40 miles from Berlin on the Oder. The day before, Simpson asked General Omar N Bradley to let his troops expand the Elbe bridgehead and push on in force for Berlin. That he would have got there seems more or less certain for he had suffered very few casualties and opposite him were only scattered, illequipped and untrained formations of General Walther Wenck's Twelfth Army which had no air support at all. Wenck commented: 'If the Americans launch a major attack they'll crack our positions with ease. After all what's to stop them? There's nothing between here and Berlin.' But Eisenhower vetoed the idea.

On the same day Stalin sent a message to the American Ambassador in Moscow to the effect that the Red Army was about to renew the offensive. The main thrust would be on Dresden with a subsidiary one on Berlin. This information was hardly accurate. The main Russian forces were directed at and astride the German capital. Could the Wehrmacht withstand the forthcoming Russian steamroller? Colonel General Gotthard Heinrici in command of Army Group Vistula (still called this although it had long since left the Vistula far away) had two armies—General Theodor Busse's Ninth Army, directly in the path between the Red Army and Berlin, and General Hasso von Manteuffel's Third Panzer Army which was on the Oder 30 miles NE of the city





The Russian conquest of Bethin super imposed on a Nov 1944 US map, compaled by the Office of Strategic Services

Red Army troops advance through the center of shattered Beilin The Reichstag looms up through the smoke and aust



and was deployed as far north as Stettin. He would be attacked by three Russian Fronts—Rokossovski's aimed at Stettin, Zhukov's at Berlin and Koniev's at Dresden.

It took the Red Army only 10 days from 16 April to surround Berlin. But it was by no means a walkover for them. The battle for the Seelow Heights, a critical position, was hard and costly. Despite all their superiority in artillery, the Russian troops came under heavy AT and MG fire which took such a toll of the advancing troops that they were stopped. This caused Stalin to order Koniev to direct his armored forces on Berlin so that on 17 April two Soviet fronts were making for the city. This was too much for Busse's Ninth Army, and by 20 April the Germans defending the approaches to Berlin were overrun. One Russian witness, Konstantin Simonov, saw the remnants of a German battle group: 'In front of us lay Berlin, and to our right a forest clearing, now a chaos of jumbled tanks, cars, armored cars, trucks, special vehicles and ambulances. They had uprooted hundreds of trees, probably in an attempt to turn round and escape. In this black, charred confusion of steel, timber, guns, cases and papers, a bloody mess of mutilated corpses lay strewn along the clearing as far as the eye could see . . . Then I noticed a host of wounded men lying on greatcoats and blankets or leaning against tree trunks; some of them bandaged and others covered in blood, with no one to tend to them. . . .

Before the Russian attack on the Oder position started, Heinrici had explained to Speer that there would be no proper battle for Berlin because the two wings of Army Group Vistula would simply withdraw respectively north and south of the city. But when it was clear to him that Zhukov had broken through, Heinrici did make an attempt to organize the Volkssturm (home guard) battalions to establish some defenses to the east of the city. But Volkssturm battalions without transport and with inadequate supplies of ammunition could never stop the Red Army.

Russians' two huge pincers

On 20 April Soviet artillery began to shell Berlin. Next day 2nd Guards Tank, 3rd Shock and 47th Armies—all Zhukov's formations—reached the outskirts of the city. At the same time Koniev was moving forward with 3rd Guards Tank Army. Then with two huge pincer movements, the Russians encircled the German Ninth Army to the SE of Berlin and Berlin itself, while their spearheads pushed on to the Elbe. By 25 April the Russians had surrounded Berlin and contacted US forces at Torgau. Now there was only one thing left to do—take Berlin and finish the war in Europe.

Col. Gen. Churkov has left his recollections of it all: 'A battery of heavy howitzers was stationed on an open grassy space beside a wood. Dark, ragged clouds were sailing across the sky. The earth seemed to doze, shivering a little from time to time from shell-fire in the distance. The gun crews had already run out the howitzers, and were awaiting the command to fire. The muzzles were trained on Berlin . . . on the fortifications of Fascist Berlin-"Fire!" The heavy shells flew up, cleaving the air with a whistling sound. The path had been opened. In the morning I went up to my observation post. It was in a large five-storeyed building near the Johannisthal aerodrome. From a corner room here. where there was a jagged hole in the wall, one got a view of the southern and southeastern parts of Berlin, Roofs, roofs without end, with here and there a break in them—the work of landmines. In the distance factory chimneys and church spires stood out. The parks and squares, in which the young

leaves were already out seemed like little outbreaks of green flame. Mist lay along the streets, mingled with dust raised by the previous night's artillery fire. In places the mist was overlaid by fat trails of black smoke, like mourning streamers. And somewhere in the centre of the city ragged yellow plumes rose skywards as bombs exploded. The heavy bombers had already started their preliminary "working-over" of the targets for the forthcoming attack..... Suddenly the earth shuddered and rocked under my feet. Thousands of guns announced the beginning of the storming operation."

The 'Fascist beast' himself had made much of making Festung Berlin an impregnable fortress. It was a myth, In March 1945 a 'Basic Order for the Preparations to Defend the Capital' had been signed and issued, but little had been done to turn Berlin into a proper defensive position. The city was defended more by words than deeds. The battle for Berlin would decide the war, Hitler claimed. So it did, but not in the way he meant. The Basic Order envisaged an outer perimeter about 20 miles out, another one 10 miles out, a third following the S-Bahn (the railway serving the suburbs), and a final citadel around the government buildings.

A plan without troops or weapons

A plan was all it was without troops and weapons. ammunition and supplies or a proper command system to control everything. The battle for the city itself never really developed. It was simply a gigantic mopping-up operation. The Red Army isolated Berlin with overwhelming numbers. Then it slowly crushed the city's life. It was impossible to fight a full-scale battle there with nearly two million inhabitants, mostly old men or women and children living in shelters. Allied bombing had forced them below ground. In any event the military organization defending the city was a fame skelton. So-called Panzer divisions had a mere dozen or so tanks and armored vehicles. After engaging the advancing Russians, they inevitably retreated, leaving the dead and wounded lying in the streets. The fighting itself was done in the midst of civilians who had themselves either been killed by rockets and shells, were cowering in cellars or desperately trying to find further cellars behind the retreating soldiers in order not to fall into Soviet hands. The streets were littered with bodies. Yet in some extraordinary way the spirit of the Berliners survived. They scrawled defiant messages on walls, proclaiming ultimate victory in spite of retreat. It was not the Gotterdammerung that Hitler had foreseen. But it had its moments of glory.

Up to 22 April Hitler was still nominally in charge of operations. One day earlier he directed his last battle. How did he conduct himself? First, he gave exact instructions to General Karl Koller, a Luftwaffe officer and Goering's Chief of Staff. When Goering had left the Bunker, Koller stayed. Like so many others he was unable to stand up to Hitler. Earnest and fussy, he would accept the Fuehrer's raving invective and threats with misgiving but without dissent, Instead he would wring his hands and examine his conscience. On this occasion, as so often before, Hitler's orders were given in the greatest detail. He selected precisely which troops were to be brought back into reserve from the northern part of the city in order to launch a counterattack on the Russians in the southern suburbs. He laid down exactly which ground units of the Luftwaffe were to be employed and in what way. The attack would be an allout and final attempt to turn the tide. Every man, every gun

and every tank would be committed, the *Luftwaffe* would put every available plane into the skies. All would be staked on a final desperate blow. An SS general, *Obergruppenfuehrer* (Lieutenant General) Felix Steiner, would command the operation.

The tactical plan for Steiner's attack was that it would be launched from the Eberswalde into the gap between von Manteuffel's Third Panzer Army and Busse's Ninth Army, so smashing the spearhead of Zhukov's drive on the city. But Army Group Steiner was a figment of Hitler's imagination. It had nothing like the strength required to mount an attack of the sort envisaged. Nonetheless Hitler told Steiner on the telephone to withdraw every man available between Berlin and the Baltic up to Stettin and Hamburg. The order was absurd. Steiner had no communication with any of these troops. Even had he the means of giving orders, there was no transport to move them. Yet when Steiner protested, Hitler broke in with an assurance that the Russians would suffer their bloodiest defeat before the gates of Berlin.

Answerable with his life

The shortage of troops was made up for by an abundance of threats. Commanding officers who did not thrust home would not live to tell the tale. Steiner's written instructions contained a specific promise that he was answerable with his life for the execution of his orders. 'The fate of the Reich capital depends on the success of your mission.' Koller too was assured that his own head would guarantee both the vigilance of the effort to be made and the success that would result. All was in vain. Hitler's granite willpower was powerless now. Skeleton German battalions could never hold back the fully manned and equipped Russian divisions. The attack never came off, It did not even cross the start-line. German withdrawal in the north simply allowed Russian tanks to stampede through to the center of Berlin. The Steiner attack had made a desperate military position still more hopeless.

Weidling on the other hand, who became Commandant of Berlin on 25 April, knew the city was almost surrounded. That evening on reporting in the Bunker to the Fuehrer and his entourage, he showed them from a sketch map that the ring around the city would soon be finally closed. In fact the ring was already closed. After explaining the dispositions of enemy and German forces, Weidling gave his view that despite the defenders' efforts, the Russians were slowly and surely advancing to the center of Berlin. The encirclement involved eight Soviet armies. On the same day, 25 April, Hitler ordered the Wehrmacht to re-establish contact with Berlin by attacking from the NW, SE and south-so bringing the battle of Berlin to 'a victorious conclusion'. The only troops Weidling had, would ever have, were some Volkssturm battalions, Luftwaffe ground personnel and Hitler Youth units, and the remainder of his own 56 Panzer Corps. These he organized into defense sectors.

Despite all these difficulties Weidling made a plan which he put to the Fuehrer on 26 April for effecting Hitler's escape from the city. Hitler rejected it. He was not prepared to be caught wandering about somewhere in the woods: 'I stay here to die at the head of my men. But you must continue to defend the city'. While inspecting defenses that day Weidling saw little to comfort him: 'The Potsdamer Platz and the Leipziger Strasse were under strong artillery fire. The dust from the rubble hung in the air like a thick fog... shells burst all round us. We were covered with bits



VAmid the flaming ruins of Berlin, two Russian infantrymen take up position. The front soldier is towing a successor to the M19107,62mm Maxim machine-gun—the SG43.



of broken stones. . . . The roads were riddled with shell craters and piles of brick rubble. Streets and squares lay deserted. Dodging Russian mortars we made our way to the underground station by jumps. The roomy underground station was crowded with terrified civilians. It was a shattering sight. . . . Colonel Barenfanger, who commanded in this sector, pressed me for more men and more ammunition. I could promise him neither. Most of his men were Volkssturm troopers who had been sent into the exceptionally sever fighting with captured arms. . . . No ammunition



Hitler's stubborn refusal to capitulate on any terms whatever subjected Berlin to the agonies of ruthless street by street fighting. Here, Russian troops warily enter a subway—prepared for spirited but futile resistance.

< A Soviet 122mm field gun in action in a Berlin street. By the time the city finally fell the day and night bombing of the Americans and British combined with Russian shelling had left hardly a building in one piece. Berlin was all but destroyed because of Hitler's obstinacy.

√Russian snipers occupy a burnt-out shop as they cover a blazing block of flats—waiting for panic-stricken German defenders to emerge. Meanwhile, Berlin civilians hastened to escape the fighting.



for these guns could be found in the whole of Berlin."

Exactly how Berlin would finally fall remained to be seen, Lieutenant Colonel Pavel Troyanovski, a 'Red Star' correspondent, was there on the same day as Steiner's abortive attack: 'It seemed as though we were confronted not by a town, but by a nightmare of fire and steel. Every house appeared to have been converted into a fortress. There were no squares or gardens, but only gun positions for artillery and mine throwers. . . . Our guns sometimes fired a thousand shells on to one small square, a group of houses

or even a tiny garden. Then the German firing points would be silenced, and the infantry would go into the attack.... From house to house and street to street, from one district to another, mowing their way through gun fire and hot steel, went our infantrymen, artillery, sappers and tanks.... On 25 April the German capital was completely encircled and cut off from the rest of the country. At the height of the street fighting Berlin was without water, without light, without landing fields, without radio stations. The city ceased to resemble Berlin. ...

On 23 April Stalin laid down the boundary between Zhukov and Koniev. The Reichstag (Parliament Building). where the Soviet flag was to be raised, was given to Zhukov. His soldiers captured the Reichstag and ran up the Red flag at about 1430 on 30 April-an hour before Hitler committed suicide. But German resistance continued in the hands of an SS officer: 'The close combat boys went into action. Their leader was SS-Obersturmfuhrer (First Lieutenant) Babick, battle commandant of the Reichstag. Babick now waged the kind of war he had always dreamed of. Our two battery commanders, Radloff and Richter, were reduced to taking orders from him. Babick's command post was not in the Reichstag itself but in the cellar of the house on the corner of Dorotheenstrasse and the Hermann Goring Strasse, on the side nearer the Spree. There he ruled from an air-raid shelter measuring some 250 sq ft. Against the wall stood an old sofa and in front of it a dining-table on which a map of the center of Berlin was spread out. Sitting on the sofa was an elderly marine commander and next to him two petty officers. There were also a few SS men and, of course, SS-Obersturmführer Babick bending over his map. He played the great general and treated everyone present in the dim candle-lit room to great pearls of military wisdom. He kept talking of final victory, cursed all cowards and traitors and left no one in any doubt that he would summarily shoot anyone who abandoned the Fuehrer.

'He thought himself safe . . .'

Babick was tremendously proud of his successes. He was hoping for reinforcements. From somewhere or another, marines had come to Berlin on the night of 28 April, led by the very Lieutenant-Commander who was now hanging about the cellar with nothing to say for himself. Babick never moved from his map, plotting the areas from which he expected reinforcements and even the arrival of "Royal Tigers" (heavy tanks), Babick was still bubbling over with confidence. For one thing, he thought himself perfectly safe in his shelter. SS sentries were posted outside, others barred the corridor to the Reichstag, and Royal Tigers, our finest weapons, were apparently just around the corner. He had divided his men into groups of five to ten. One group was commanded by SS-Untersturmführer (Second Lieutenant) Undermann; he was posted south of the Moltke Bridge in the Ministry of the Interior (the building the Russians called "Himmler's House") and the bridge itself lay in his line of fire.

'Then an SS ensign, aged about 19, came to Babick with the report that Undermann and his men had come across some alcohol and that they had got roaring drunk. As a precaution he had brought Undermann along; he was waiting outside. Babick roared out the order: "Have him shot on the spot!" The ensign clicked his heels and ran out. Seconds later we heard a burst of fire from a submachine-gun. The boy reappeared and reported: "Orders carried out." Babick put him in charge of Undermann's unit. Our ranks in the

Reichstag got thinner and thinner. Part of our battery gradually dispersed, and by the night of 30 April, no more than 40 to 50 people, soldiers and civilians, were left in the cellar. This remnant was now busy looking for the safest possible hiding-places. There we intended to sit tight until the Russians came. But they kept us waiting for another 24 hours. At dawn on 1 May, we heard over our portable radio that the Fuehrer had "fallen in the battle for the Reich Capital", his wife at his side. Goebbels and his family had gone the same way. We were our own masters, at long last."

The only thing still to be done was to negotiate with the Russians in order to surrender what was left of the city. By this time all that was left in German hands were the Government buildings, part of the adjoining Tiergarten and the area between the Zoo and the Havel river. Hitler had forbidden Weidling to capitulate but he had authorized a break-out, After Hitler's death Martin Bormann, the Deputy Fuehrer, had sent a telegram to Admiral Karl Donitz in Ptón, appointing him as Hitler's successor. Donitz, not realizing that Hitler was dead, replied: 'My Fuehrer! My loyalty to you will be unconditional. I shall do everything possible to relieve you in Berlin. If fate nevertheless compels me to rule the Reich as your appointed successor, I shall continue this war to an end, worthy of the unique, heroic struggle of the German people.' But Goebbels and Bormann were trying above all to put an end to the pointless bloodshed. They therefore made contact with the Russians who agreed to receive a German representative.

This was Lieutenant General Hans Krebs, Chief of the

General Staff since Guderian's dismissal on 28 March, who spoke Russian and had been in Moscow as Military Attache. He met Gen. Chuikov, Commander of the 8th Guards Tank Army, at Schulenburgring near Tempelhof Airport, at 0400 on the morning of 1 May. He had been authorized to negotiate only a truce or armistice, but the Russians, despite suspicions that the Western Allies were contemplating a separate peace with the German armies in the West, refused to consider anything except unconditional surrender. When Krebs referred to 1 May as a day which their two nations shared as a holiday, Chuikov drily observed that it might be a fine day in Moscow, but he could not say the same for Berlin, Thus Krebs failed and he committed suicide after returning to the Bunker, Next Weidling tried to negotiate. On the following morning he crossed the line dividing the two armies and surrendered the Berlin garrison with its 70,000 troops. The battle for Berlin was over. The question now was how would the Russians behave?

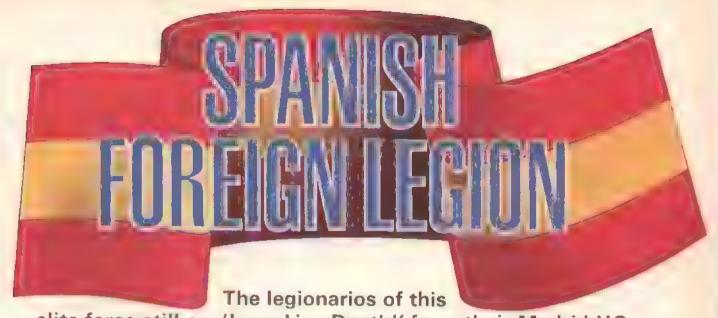
Rape, looting, burning and murder became commonplace. Hitler's very last War Directive of 15 April had made it clear what fate threatened a defeated Germany: 'While the old men and children will be murdered, the women and girls will be reduced to barrack-room whores.' Even at the end Hitler's reliance on propaganda and foresight did not desert him. But better things were on the way for Berlin. The Red Army positioned more disciplined regiments there: American troops reached the city on 1 July; the British arrived next day.

John Strawson

Berlin shattered and in flames beneath, two Russian soldiers hoist the Red Flag atop the Reichstag - the scene of some of Adolf Hitler's most bombastic statements. The German Fuehrer did not live to witness this scene



Nomen (Lange



elite force still cry 'Long Live Death!' from their Madrid HQ

During the Sahara crisis late in 1975 the world's television screens revealed the existence of a virtually forgotten volunteer military force—the Spanish Foreign Legion. Yet in only 55 years of existence it has fought nearly 4,000 engagements and sustained 46,000 casualties. Like its French counterpart, the Legion has since had to forsake its most glamorous overseas posting, but it remains the volunteer corps d'elite of the conscript Spanish Army.

In 1919, a one-eyed, one-armed lieutenant colonel, José Millan Astray, a man who displayed religious, military, and patriotic fervor to the point of fanaticism, thought up the idea of a corps of purely professional volunteer soldiers to serve permanently in Spanish Morocco. The task of pacifying and policing the territory acquired by Spain in 1912 would fall to them. The Spanish General Staff thought the idea sound, but before making any official move, Astray was attached to the French Foreign Legion depot at Sidi-bel-Abbes in Algeria, in order to study the training methods and organization of the then 88-year-old French corps. At the end of his tour, Millan Astray admitted that he had learned a great deal, but that his conception varied fundamentally from the French pattern.

To start with no Frenchman was, or is, permitted to join the ranks. Those who do seek an engagement are obliged to declare themselves either Swiss or Belgian, A strictly apolitical force, a French Legionnaire's lovalty is above all to his regiment. 'What is your nationality?' Marshal Louis H. Lyautey asked one man during an inspection of a Legion battalion at Fez in Morocco. 'Legionnaire, mon General.' was the prompt reply. For Millan Astray, it was essential that his future legionarios would share his passionate devotion to Spain and Catholicism. 'Foreigners' would be allowed to join, but he intended that the vast majority be Spaniards. In fact the word 'foreign' in qualifying the Spanish Legion is largely due to a misunderstanding of the word extranjero, which, in Spanish can signify 'foreign', 'foreigner', or 'abroad'. This La Legion Extranjero did not imply a 'Legion of foreigners' but a 'Legion to serve abroad'.

Shortly after his return from Algeria, Millan Astray sub-

A Legionano of the Civil War period. His forage cap bears the Legion badge of an arquebus crossed with a halberd and crossbow. The 9½ b rifle is an M1893 7mm Spanish Mauser.



mitted the official proposal for the formation of this professional corps based on eight principles.

1 'The Legion will represent the highest peak of the virtues of our glorious Infantry, of our invincible Army.'

2 'The Legion will serve as the base of a Colonial Army.'

3 'The Legion will save many Spanish lives, because the legionarios will be prepared to die for all Spaniards.'

4 'The Legion will be constituted by volunteers of all countries, who will sign individual engagements under either their real or assumed names, thereby absolving the Spanish State of all responsibility concerning them.'

5 'The spirit of rivalry created by recruits of various nationalities will enhance the spirit of the Legion.'

6 'Legionarios signing on for four or five years, then reengaging will become true professional soldiers tempered by the fire of combat.'

7 'The mother unit will afford a haven for vagabonds, delinquents and criminals of whom the mainland has been

8 'To the homeless, the wretched, those craving military glory, the hungry, the Legion will give bread, asylum, a family, a country and a Standard for which to die.'

Astonishingly, the plan was approved and funds granted. This despite the fact that anti-colonial agitation was rife, and cities throughout Spain were plastered with the slogan: 'Not a man, not a peseta more for Morocco'. The Royal Decree was signed on 2 September 1920 and Millan Astray received his appointment as Jefe (Chief) of the Legion the same day.

With a small staff, he crossed to Ceuta and established his HQ in a semi-ruined barracks—the only accommodation available. Recruiting offices were opened in the more important urban centres of the mainland.

'Welcome to death!'

The first man to sign on was a Spanish inhabitant of Ceuta. By the end of September 400 men from the four corners of Spain had volunteered, were assembled at Algeciras and shipped by the first suitable vessel to Ceuta. A ragged, tattered bunch they were-literally the dregs of the cities. The majority were Spaniards, but among the 'foreigners' were three Chinese and one Japanese. Once disembarked this motley collection was formed up on the quayside to listen to a 'welcoming address' by their commander: 'The Legion greets you with joy' he said. 'You are here to form part of an honourable corps soon to become the foremost of our glorious Infantry. The life which awaits you' he went on, 'will be hard and terrible. You may starve, You will certainly suffer the torments of thirst. A pitiless penetrating rain will beat down on you. In summer a fiery sun will burn you to the verge of madness. You will dig trenches, construct camps to the point of exhaustion never knowing when you may expect your next meal. You will receive wounds. Your bones will be broken. But your final destiny is to die that clean death which only the field of battle can offer , . . The Legion takes you to its heart. Welcome! Caballeros ('Gentlemen') Legionarios attention! . . . Fall out!' One member of the original contingent has recorded: 'The new legionarios marched to their barracks filled with

To distinguish the Legion from Line regiments, Millan Astray had decided that major units of roughly brigade strength would be named tercios, after the famous Spanish infantry units of 1534-1643. Each tercio was to be divided into two or three banderas—equivalent to battalions. Their



training, begun immediately, mirrored their leader's words At the same time the psychological, spiritual, aspect of their 'mission' was stressed. The Legion's battle-cry—thought up by Millan Astray—was 'Viva la Muerte' ('Long Live Death I'); the motto adopted, and still quoted with great pride, 'Los Novios de la Muerte' ('The Betrothed of Death'). The conversion of this rabble into a corps d'elite was largely thanks to the efforts of Millan Astray's hand-picked original staff and his 28-year-old second-in-command, Commandante (Major) Francisco Franco y Bahamonde—dictator of Spain for 36 years until his death in November 1975.

It was not long before the Legion received its baptism of fire as the *Tercio de Marruecos*. The Riff tribesmen who, it should be noted, despite the chorus from that popular musical 'hit' of the 1920s, the 'Desert Song', are not horsemen but sturdy mountaineers, had from the beginning carried on a form of guerilla harassment of the Spanish. They only needed a leader capable of organization to turn to open revolt.

Such a leader was found in the person of Abd-el-Krim of the Beni-Ouriaghel tribe. His success was immediate. The Spanish hold on the hinterland was precarious. Their garrisons and strongpoints were for the most part undermanned and dangerously isolated one from another. The Riff onslaught overwhelmed one post after another, finally inflicting a severe defeat on the Spanish main force at Anual, By August Abd-el-Krim virtually controlled the whole Spanish Zone with the exception of a narrow coastal strip and a salient including Tetuan, the capital, and the mountain city of Xauen.

□ General Millan Astray y Terreros (1879-1954), fanatical, one-eyed and one-armed founder of the Legion known as 'El Gran Mutilado' and an extraordinary military ascetic. □ Commandante (Major) Franciso Franco y Bahamonde (1892-1975) chosen by Astray as his second-in-command and largely responsible for the Legion's military expertise. Commanding it in 1925 he suggested and led the amphibious landing west of Melilla behind Abd-el-Krim's Riff lines.



Though the Legion was, strictly speaking, still in the process of formation and lacked full equipment, I and II Banderas were thrown into the battle, and actually managed to re-occupy a number of small posts, notably Atalayun and Sidi-Hamid-el-Hach.

Many of these regained positions soon found themselves cut off without hope of relief. As the Riffs swarmed in to assault one position, the young lieutenant in command managed to send back a heliographed signal: 'I have 12 rounds left for my gun. When you hear the 12th explosion bring down the fire on the position so that Moors and Spaniards may die together.' In another, even more isolated position, the Legion garrison fought on until food, water, and ammunition had been exhausted. Impressed by such fighting spirit, Abd-el-Krim himself sent a message to the effect that the defense had been so heroic, that if the white flag were raised, he would guarantee the legionarios safe return to their own lines. The commander, again a young lieutenant, replied that he and his men had sworn to defend the position to the death and would not depart from their oath.

Petain crushes Abd-el-Krim

The war might have dragged on indefinitely. Abd-el-Krim received massive reinforcements of European mercenaries, adventurers, and anti-colonialists, as well as a great deal of money. But success and publicity went to the Riff leader's head and led him into the fatal error in 1925 of attacking the French Zone and threatening the ancient capital of Fez. By 1926, Abd-el-Krim was facing not only the Spanish Army, but a French expeditionary force, 100,000 strong, led by Marshal Henri Philippe Petain. The end came rapidly. On 26 May, after a brief but hard-fought campaign, Abd-el-Krim surrendered to Colonel André G Corap, the man who, as a general in May 1940, commanded the French Ninth Army which broke before the German attack at Sedan on the Meuse.

By the time the war ended, eight banders had been raised. Only nine per cent of the Novios de la Muerte were of 'foreign' extraction. The legionarios had certainly lived up to their motto; 2,000 had died, including four jefes (chiefs) of banders, and 6,096 had been seriously wounded

An interval of peace followed, during which time the depleted banderas were rebuilt to full strength. There was talk of raising further units when in 1931 a coup d'etat in Spain replaced the monarchy by a republic, Being deeply right wing and wedded to the idea of the king as His most Catholic Majesty, the leadership of the Legion was profoundly disturbed by the change of regime. Those who had taken power in Madrid viewed the Legion with deep-rooted suspicion. But this did not stop them from calling on the Legion to suppress a revolt in NW Spain by the Asturian miners, better known as Los Dinamiteros for their habit of tossing sticks of dynamite at all and sundry opposed to their views. Their revolt erupted at the end of September 1934 The III Bandera was disembarked at Barcelona on 9 October and the V and VI at Gijon on the 10th. All three banderas, under Franco's command, were in action the next day.

This action was one of the least publicized incidents of the inter-war years. Despite its brevity—being finally suppressed by 21 October—it was also one of the most bloody, violent and ruthless of modern history. Fighting raged day and night in Gijon itself, Oviedo, Trubia and the mining centers of Mieres and Cabana Quinta. No prisoners were taken; no quarter asked or given. Legionarios and Dina-



The Legion's three main campaigning areas; Morocco 1920-1927 (Riff revolt), Spain 1934 and 1936-39, and Spanish Sahara 1956-76. The Canaries remain a posting. Parade of 'Alejandro Farnesio' Tercio 4, V. Cisneros 1969.









'Men of the Legion with Republican prisoners and captured rifles. They spearheaded the initial Nationalist advance on Madrid and lost 7,645 dead during the 32-month civil war

A smiling Franco beneath the banner of the Legion during the reconquest of Spanish Morocco, c. 1925. Gen. Sanjurjo, the C-in-C wearing the cap, stands next to Franco.

∇Officers of XV Bandera Irlandesa del Tercio at Caceres in 1937. The Legion's first all foreign unit, 600 Irish volunteers, was under General Eoin O'Duffy seated in the middle of the front row. Organized into the usual one MG and three rifle companies (estab. 747 men), the bandera served six months losing 15 killed.



a B Tm.n

miteros slaughtered each other as though intent on wiping out packs of rabid dogs. There could be no argument; the Tercio had saved the Republic.

By 1936, political passions had reached such a pitch that a clash between extreme Right and extreme Left was inevitable. Striking first, Franco escaped from virtual exile in the Canaries to reach Tetuan, the Tercio instead of being increased had been reduced to six banderas, each of four companies. As their original second-in-command and Astray's successor during 1923-27, Franco counted on the Legion to act as the spearhead of his nationalist movement His immediate problem, since no resistance to the Nationalists was put up in Morocco, was to transfer the whole force to the mainland as quickly as possible. As most of the fleet had passed into the hands of the Republicans even the onehour crossing of the Straits of Gibraltar was a hazard. Still, a massive convoy was organized on 5 August. There was a running battle with the Republican destroyer Alcano Galiano, but astonishingly the transport vessels reached Algeciras without loss.

For almost the next three years, the Spanish Legion was constantly in action. Wherever there was a crisis, so also was the Legion. During this period, its strength trebled to a total of 18 banderas, each of four companies (about 600 men), and armored car and flame-thrower companies were formed. The war seemed to exacerbate the Legion's antiforeign tendency, so much so that it was common gossip that when the Italian Division was routed by Spanish Republican Militia at Guadalajara, never again to be engaged, the *legionarios* were very pleased, looking on it as a triumph of Spanish arms over the 'foreigner'. Nevertheless, nearly all the handful of British volunteers fighting on the Nationalist side did so in the Legion.

By the middle of 1936, the ancient city of Badajoz was a Republican stronghold, organized within the formidable ramparts. Nationalist artillery had forced a breach in the walls, and IV and V Banderas advanced to storm the breaches. No sooner were they through the gap than the



leading companies (12th and 16th) found themselves enfiladed by well sited MG posts. Relying almost entirely on hand grenades and the bayonet the two companies cleared these positions. The 16th Company suffered appalling casualties in the process. But their sacrifice allowed their other two companies, supported by the V Bandera to push through the breach to close in on the core of the Republican defense, the Cuartel de la Bomba. After a desperate handto-hand struggle it was captured. While this battle was in progress an MG from a Republican position in the Cathedral tower opened up. The survivors of 16th Company were told to wait for reinforcements being rushed to them, then to silence the gun. The company commander signalled back: 'I have 14 men left. I don't need reinforcements.'

By 1600 the last remnants of opposition had been overcome and the city was firmly in Nationalist hands, General Don Juan Yaque, himself a Legion officer, commanding the Cuerpo Ejercito Morroqui (Moroccan Army Corps), sent his congratulations adding: 'Legionarios / You have

deserved your triumph for faced by men who only know how to hate, you can still love, laugh and sing I' In late 1937, the Republicans, anticipating a Nationalist

offensive, launched a major attack in the area of Teruel. The III and XIII Banderas were hurried to the scene, the III being ordered to assault strong Republican positions in the neighborhood of Rincon de Molinero after an approach march in such bitter cold that a number of the men became frost-bitten. Nevertheless their unexpected attack drove the enemy from the first line of trenches, the legionarios following so close on their heels that the defenders of the second line, also totally surprised, were hard put to to tell friend from foe. One legionario has recalled: 'An enemy battalion commander gave orders to our 8th Company "to turn and face the foe". He adds: "It was not until a grenade was lobbed at his feet that, too late, he discovered his error." Rincon del Molinero fell; among the prisoners was the Republican brigade's Chief of Staff who complained that such was the fury of their attack that his captors were more like devils than men ('Mas parecen demonios que hombres').



Less fortunate, the XIII Bandera suffered more than 400 casualties from 27 to 30 December. During this time, cut off from the main body and with the temperature 15° below zero, they beat off the constant attacks of five battalions supported by tanks and a heavy concentration of artillery. before falling back to their orginal positions.

In the summer of 1938, the Republican forces seeing defeat staring them in the face, made a last desperate attempt to gain a major victory. They chose the Ebro valley as the scene. An imposing force of 131 infantry battalions, three cavalry regiments, six companies of armored cars, two tank battalions and 107 batteries of artillery or various calibres, was concentrated on the north (left) bank of the river. The offensive, launched at 0015 on 25 July, established a wide bridgehead at the expense of the 50th Nationalist Division which was virtually wiped out. In view of the dangerous situation thereby created, seven banderas were moved up to the front. At the cost of very heavy casualties, the III, XVI, IV and XVII Banderas confronted and slowed down the second stage of the Republican offensive in the area of Gandesa and finally halted it on 7 August. A very momentary full followed.

Franco was of the opinion that a parallel existed between this despairing effort of the Republicans and the German offensive on March 1918. He considered that the enemy having committed his reserve and having failed to attain his objective, the hour had struck for a major counter-offensive which should prove to be the last, and decisive phase of the war. Probing attacks, mostly spearheaded by the banderas were maintained throughout August, and on 3 September. again headed by the Legion, the Nationalists went over to



the attack, lost three killed, 28 wounded

AXIII Bandera evacuates the Sidi Ifni enclave

board a four-engined Douglas DC4 airliner.

(ceded to Morocco) in 1969. Equipped with the

7.62mm CETME Modelo 58 assault rifle, the men

Curfew-in El Aaiun, Spanish Sahara (1975). The

legionario with the cap cover holds a Z45 SMG.

the offensive. The Republicans fought back with extreme courage. A climax in the fighting was reached during the 6-16 September. These 10 days are generally reckoned to be the bloodiest of an exceptionally bloody war.

The IV Bandera was heavily engaged on the 9th in an attack on La Aguja. Captain Mazzoli was in the van with the 11th and 16th Companies, advancing under withering fire from the front and the left flank. He was on the point of launching the assault when he was fired on from the right. from a ridge which had been held by troops of the Nationalist 1st Navarre Division. Supported by tanks and mortars. the enemy had almost overrun the position when 'Captain Mazzoli, electrifying his legionaries by his valour, switched the direction of his attack to meet this new threat. Continuing to advance coolly in the face of a murderous fire, Mazzoli and his inspired legionaries cleared the enemy from the height, thus restoring a situation which, for a moment had seemed critical. At the instant of his triumph Captain Mazzoli was hit in the chest by a projectile fired from a Russian tank, dying shortly afterwards . . .

Foremost in defense and attack

By the end of September, the Republican front had been pierced in three places. But a wide pocket of resistance still remained in the area of the Sierra de Caballs. Most of the Sierra peaks were captured by the Nationalists in continuous fighting which raged all through October, but on 7 November the Republicans threw in a series of counter attacks all of which were resisted, though not without heavy loss and many anxious moments, chiefly by III, V and XIII Banderes. A battle which had raged since 2 July finally ended on 14 November, Catalonia, the heart of Republican Spain was now almost defenseless. Despite their efforts and severe losses, the banderas were given no rest. In the vanguard of the final advance on Barcelona and Saragossa, accentuating the pressure on Madrid, many more names were added to the Legion Roll of Honor before the final cease-fire sounded. They had participated in 3,000 actions. Their losses totalled 37,393 killed, wounded and missing

Promoted Minister of the Air in the first Franco Cabinet, Yagüe sent a long and emotional farewell to 'his' legionarios who 'in moments of supreme peril ask only the honour of being in the forefront of battle and as a sole reward the honour to be a legionary', ending 'I bequeath to you my admiration, my affection, my whole heart . . . VIVA LA LEGION . . . VIVA NUESTROS MUERTOS I Your general, YAGUE.'

Most of the Legion returned to Morocco soon after the end of the Civil War in April 1939. An inevitable reduction in overall strength was begun, the Legion being reorganized into three tercios named 'El Gran Capitan', 'El Duque d'Alba' and 'Don Juan d'Austria', all of three banderas, a fourth tercio 'Alejandro Farnesio' being raised in 1950. In 1956, on Moroccan Independence, the tercios 'Don Juan d'Austria' and 'Alejandro Farnesio' were transferred to the Spanish Sahara to garrison the El Aaiun and Villa Cisneros areas.

Spanish presence in the western Sahara dated back to 1476 when a Captain Diego Garcia de la Herrera founded a post he named Santa Cruz de Mar Pequena, and persuaded the chiefs of the desert tribes to 'swear fidelity to the Kings of Castilla'. The post was overrun in 1524. There is no official record of the disaster since there were no survivors. Spain did not return to the area till after the 1861 Treaty of

Tetuan, by which the Sultan of Morocco granted the permanent concession of 'a parcel of land big enough to shelter a fishing establishment' on the site of the former Santa Cruz de Mar Pequena, an 'establishment' which, in 1883, became known as Sidi Ifni.

For years conditions in the Spanish Sahara were comparatively peaceful, its security being assured by a single battalion of *Tiradores de Ifni*. But by 1956 the anti-colonial crusade was in full swing. The *tercios* were in action almost from the moment of their arrival. There were numerous skirmishes all through 1957 as a string of strongpoints were established inland, culminating in the major encounter of Edchera on 13 January 1958.

The XIII Bandera was on a large-scale reconnaissance of the Edchera-Saguia area, Just after midday on the 13th the leading company had crossed a dried-up bed of the river when it came under concentrated fire not only from rifles but automatic weapons and mortars. The attack was well directed from a low ridge about 400 to 500 yards ahead. One platoon which had pushed on too rapidly was decimated. A large body of the enemy was seen to belong to an organization calling itself the Army of Liberation. They managed to work their way through the dunes to fall on the left flank company. The maneuver was spotted. In the fierce little battle that ensued, the attackers were beaten off leaving over 50 dead. The sun was setting by this time and the Legionaries dug in for the night intending to assault the enemy positions at dawn. But discouraged by their heavy losses, the tribesmen wisely took advantage of the darkness to pull back into the desert after destroying an ammunition dump. They did not even take with them the bodies of nearly 200 of their comrades who had fallen during the action.

The Legion and the 'March of Conquest'

This minor battle had a salutary effect. Though there have been many clashes since, no major force either Saharan or of the various powers claiming the area have cared to risk a full-scale encounter with the Legion. Indeed respect for its fighting abilities may well have been instrumental in avoiding a direct confrontation in the dispute between Spain and Morocco. King Hassan's so-called 'March of Conquest' with 250,000 Moroccans in November 1975 went as far as the Legion's minefields and defenses 10 miles north of El Aaiun before a negotiated settlement was reached under which Spanish troops left the Sahara by February this year.

In the meantime, the Legion which celebrated its 50th anniversary in 1970 had undergone certain basic changes in organization, since the vast spaces of the Sahara emphasized the importance of mobility. Some of the banderas are motorized. The tercios have their own armored squadrons and motorized artillery batteries. It was the Grupos Ligerios with their Panhard armored cars which featured so prominently in the television coverage of the Saharan dispute. An elite battalion of Cabelleros Legionarios Paracaidistas ('Gentlemen Legion Parachutists') was formed in 1961.

In what other corps or regiment in the modern world would a recruit first lay a wreath and stand in silent contemplation before the memorial to his unit's dead, then embrace the folds of his Standard held out to him by a priest while his commanding officer, sword drawn, stands rigidly to attention, before being able, with genuine pride and fervor, to take his place in the ranks and call himself a Novio de la Muerte?

Patrick Turnbull

Originally a civil airliner, the 'flimsy hunter' of the Atlantic skies was a severe threat to Allied shipping



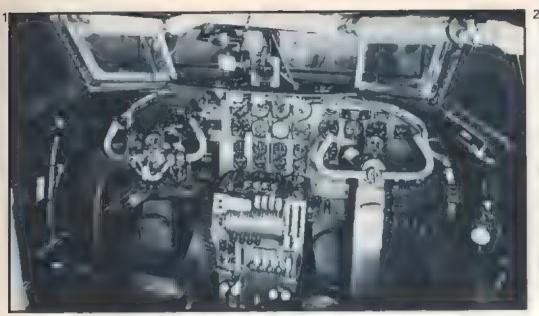
A FW200C-3 being refuelled and serviced. While still liable to structural failure, this version had a strengthened fuselage. and rear spar. With four 1.000hp BMW-Bramo engines this Condor had an improved bomb-load of 4,626lb Alone among the bombers to see service in any quantity. Subsequent prototypes were powered by the BMW 132

been designed as a commercial airliner. Yet in 1940-41 the slim four-engined, high-performance FW200 became notorious as the 'Scourge of the Atlantic'. During that period it sank at least a quarter of all Allied merchant shipping lost U-boats.

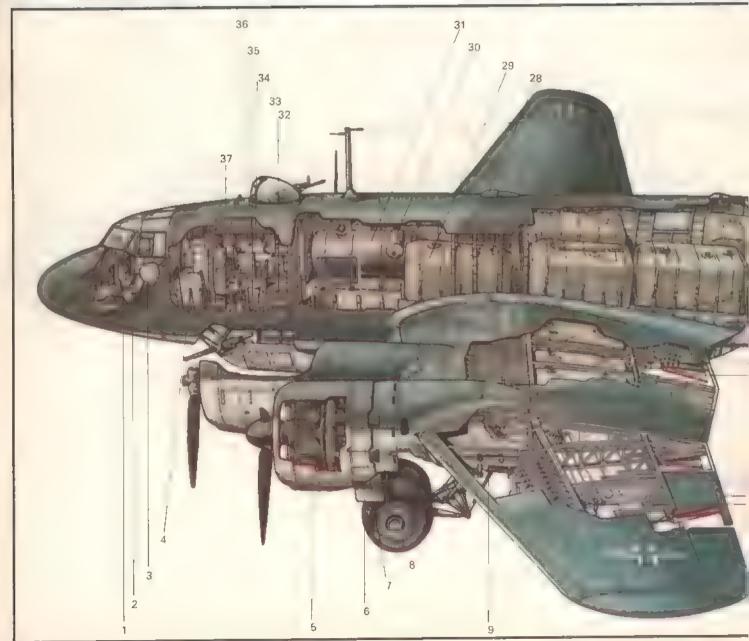
The Focke-Wulf Condor began life in the spring of 1936. following discussions between Professor Kurt Tank, Technical Director of the Focke-Wulf Company, and Dr Stuessel of Lufthansa on a four-engined, 26-passenger airliner capable of undertaking trans-Atlantic flights. The airline placed a development contract and in July 1937 the cooled radial engines each developing 875hp for take-off, cameras, and extra fuel tanks in the fuselage,

during World War II, the Focke-Wulf Condor had originally engine, which developed only 720hp; on this power the Condor had a maximum speed of 228mph at sea level.

During the summer of 1938 the second prototype Condor was used in a series of remarkable long-distance flights, to demonstrate the capabilities of the airliner. Three of the to Axis air attack and over a sixth of the total sunk by records it set then still stand in 1976; Berlin to New York direct in 24 hours 56 minutes (10 August 1938), Berlin to Hanoi in 34 hours 17 minutes and Berlin to Tokyo in 46 hours 18 minutes (November 1938). These flights had the desired effect and the aircraft was ordered for airlines in Denmark (2), Finland and Brazil (2) while Lufthansa operated five. Japan's airline also ordered five of these aircraft for service as transports, and the Imperial Japanese first prototype of the new aircraft began its flight trials only a. Navy expressed a strong interest in a long-range maritime year after the contract was signed. The Condor was a patrol version. To meet the latter requirement Tank and his remarkably clean machine of conventional four-engined design team drew up plans for a Condor modified to carry layout, powered by four Pratt and Whitney Hornet air- three defensive machine-guns, a pair of vertically-mounted





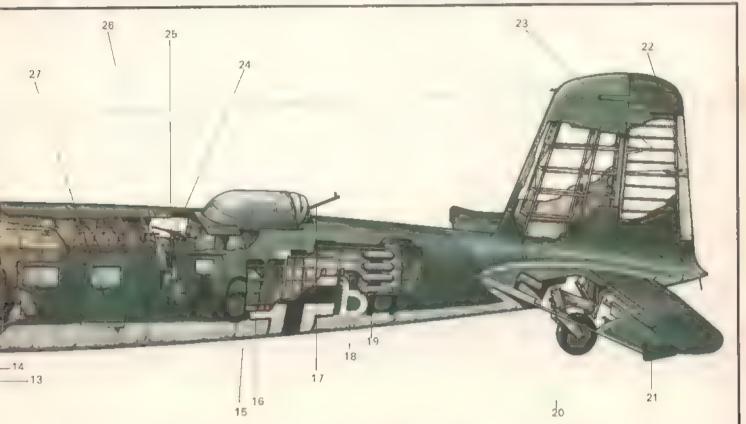




1 The cockpit of a Condor. The throttle quadrant holds the four throttle levers, pitch, flap and undercarriage controls. Behind each wheel are the flying instruments.



2 Forward ventral 20mm MGFF on a FW200-C 3 The 20mm MG 161 forward ventral gun of the FW200-C3. 4 551/b bombs below outboard nacelle and underwing rack.

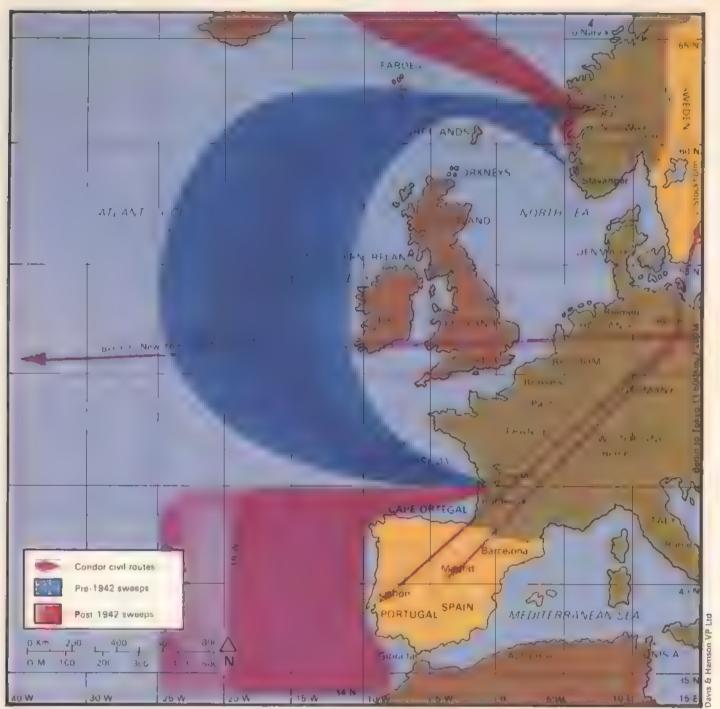


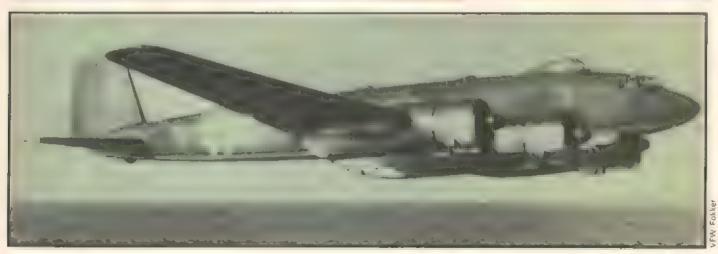
- 1 Pilot's controls
- 2 Pilot's seat
- 3 Pilot's circular vision port
- 4 Rear dorsal gunner's takeoff seat
- 5 BMW Bramo 323R-2 nine-cylinder radial aircooled engines (four)
- 6 Carburettor an intake
- 7 Cooling gills
- 8 Twin mainwheels
- 9 Underwing bomb-rack

- 10 Aileron controls
- 11 Aileron trim-tab
- 12 Aileron
- 13 Flap
- 14 Wing fuel tanks
- 15 Dorsal turret
- 16 F stand ammo racks
- 17 B-stand MG 131, 13mm
- 18 B-stand animo racks
- 19 Oxygen bottles
- 20 Forward retracting tailwheel
- 21 Endplate fin balance

- 22 Rudder trim-tabs
- 23 Rudder construction
- 24 F-stand MG15, 7.9mm
- 25 F-stand ammo racks
- 26 Beam-guiners take off seats
- 27 Access door
- 28 Cahin ventilators
- 29 Five canted fuselage fuel tanks
- 30 De-icing fluid reservoii
- 31 Fuselage oil tank
- 32 D-stand ammo racks
- 33 A stand MG15 7 9 mm
- 34 A-stand ammo racks
- 35 Radio-op's seat
- 36 Radio-op's rectangular vision port
- 37 D-stand MG131, 13mm

FOCKE-WULF 200C-3 'CONDOR'





□The Luftwaffe's acquisition of bases in France and Norway enabled the Condor to cover large areas of the Atlantic round the coasts of Britain.
 □∇Bombs gone, a FW200C-1 heads back for base at low altitude to avoid radar tracking, west of N. Ireland.

The Luftwaffe had planned that the new four-engined Heinkel 177 bomber would fulfill the long-range maritime patrol and bombing role, but the first prototype of this aircraft had yet to fly when war broke out and at least two years would elapse before it was operational. A stop-gap had to be found. Charged with the task of finding an aircraft suitable for the role, Oberstleutnant (Lieutenant Colonel) Edgar Petersen chose the Condor. He immediately requisitioned the 10 aircraft on the Focke-Wulf production line at Bremen, including those intended for the Japanese Navy and the Finnish airline.

Petersen then set in train the military modification of the aircraft upon which work had just been started. The FW-200C, as the new version was designated, carried a defensive armament of three 7.9mm MGs and a bomb-load of five 550lb bombs, two under each wing and one under the fuselage. The five-man crew, one more than the airliner's, comprised a pilot, a co-pilot, an observer/radio operator/gunner, and engineer/gunner and a dorsal gunner. By the end of 1939 six Condors had been delivered to the Luftwaffe, and early in 1940 / Gruppe of Kampfgeschwader 40 began to re-equip with the type for the maritime role.

The Condor carried out its first operational missions in April 1940, during the Norwegian campaign. Although intended for the long-range anti-shipping role and carrying out its initial sorties for this purpose from Danish bases, KG40 was soon ordered to operate as an emergency transport unit flying supplies to German forces cut off at Narvik in the extreme north of Norway. Only when the situation had stabilized in the Germans' favor did the Condors revert to their intended role.

It was with the fall of France in June 1940 that the Condor came into its own. FW200s flew combined reconnaissance, weather reporting and bombing missions round the west of the British Isles from the newly-won bases at Bordeaux in France to Stavanger and Trondheim in Norway. By the year's end the Condors had destroyed a total of 19 merchant ships in the Atlantic. They could have achieved a great deal more, but KG40 never had more than 12 Condors and production barely kept pace with losses. Serviceability was poor and on the average there was only one of these aircraft available for operations each day. Furthermore Condors were frequently diverted to take part in night attacks on targets in Britain and to carry out minelaying operations off the coast. The FW200 proved too large and unwieldy and was withdrawn from these tasks which could in any case, be done better by the smaller types of bomber available to the Luftwaffe in large numbers.

The autumn of 1940 saw the beginning of the golden times for Condor crews. Because most British merchant ships lacked any form of AA defense, and the Royal Navy was desperately short of escorts with which to cover them, the marauding bombers were able to set about their task of destruction with little hindrance. One of the pilots involved, Hauptmann (Captain) Bernhard Jope, has told the author: 'The convoys, even quite large ones, often sailed with hardly any escorting force at all. And few of the ships carried flak weapons. On the Condor we could carry only a few bombs, but we could go in at very low level when

attacking the ships and try to make every one count."

Jope himself had a particularly successful debut, for during his first Condor sortie on 26 October 1940 he chanced upon the 42,348-ton troopship *Empress of Britain* 70 miles NW of Donegal Bay, Ireland. This Canadian Pacific Company liner had set a 1934 Atlantic eastward-bound passage record of 25.08 knots. There followed a hard fight during which Jope had one of his engines shot out by the ship's AA guns. But he was able to score two direct hits on the ship and start a serious fire; two days later *U32* found the troopship being towed in, and finished her off with torpedoes.

As well as carrying out bombing attacks, the Condors were to radio back information on the whereabouts of convoys so that the U-boats could gather for the kill. In the event, the sighting reports rarely proved of use. Operating far beyond the range of their radio aids, the Condor crews were unable to give accurate positions on the ships which they did find. Positional errors of up to 70 miles were not uncommon, far too great for successful U-boat operations. Whenever the U-boat Command acted upon these reports, its boats almost invariably went astray and gradually, the German Nevy came to lose confidence in this form of reconnaissance.

Condor's most successful month

Early in 1941 there was an interesting reversal of the intended roles of aircraft and submarine. On 8 February U36 sighted convoy HG53 heading northwards from Gibraltar, some 400 miles west of the southern tip of Portugal. After carrying out a torpedo attack the U-boat commander, Kapitänleutnant (Lieutenant) Clausen, broadcast radio signals to home-in the Condors of KG40. Five arrived on the scene and sank five merchant-ships in quick succession. This opened the most successful month of FW200 operations. On 19 February these aircraft located the westbound convoy 0B287 off Ireland and during the subsequent action sank two large merchantmen and damaged four others. On the 22nd the bombers found the next westbound Atlantic convoy, 0B288; the Condors attacked and damaged two of the ships. Then, as the result of an unusually accurate series of position reports, a 'Wolf Pack' of U-boats was able to find the convoy and sink 10 more.

A few days later 0B289 suffered the Condor's deadliest attack. The U-boat ace Korvettenkapitän (Lieutenant Commander) Günther Prien, in U47, found the convoy on the afternoon of 25 February; that night he sank three ships. Next day he shadowed the convoy broadcasting homing signals, as a result of which six Condors sank seven ships totalling over 36,000 tons and damaged four more, over another 20,000 tons.

For the Condors operating far out over the Atlantic the pickings had indeed been good. But it was too good to last. Back in the summer of 1940 the Royal Navy had initiated a crash programme to defend the merchantmen from this form of attack. During the spring of 1941, it began to bear fruit. More and more escort vessels were being pressed into service, as fast as they could be built. The more important and the more fortunate of the merchant-ships were fitted with medium or light AA guns. For the rest there were Lewis MGs, kites, Hollman Projectors or Parachute and Cable sets—anything to hit back at the low-flying attackers.

The Hollman Projector used steam pressure from the ship's boiler to shoot simple Mills hand-grenades into the air, where they exploded with a small cloud of splinters. The



Parachute and Cable device was rather more ingenious and considerably more lethal. As carried by ships it comprised a small rocket, which hoisted the top of a 600ft-long wire 1,000ft into the sky. At the top of the rocket's trajectory a small parachute deployed to suspend the wire, at the bottom of which was a small bomb, in front of attacking aircraft. If an aircraft struck the wire the drag of the parachute pulled up the bomb until it struck the aircraft. Probably the most bizarre of the anti-Condor measures were the 'wolf-insheep's-clothing' freighters, ships fitted with heavy but concealed batteries of AA guns, which straggled invitingly behind convoys. They tended to get sunk by U-boats.

Most lethal of all for the German long-range bombers, though still very unorthodox, was the attempt from April 1941 to provide 'instant' fighter cover for convoys by means of Hurricane fighters catepaulted off the decks of specially modified merchantmen (CAM ships). The intention was that the fighter pilot should either shoot down or drive away the attacking Condor then, if an airfield in neutral or friendly territory was within range, he was to make for it. Otherwise he had to bail out or ditch his aircraft and hope to be picked up by one of the ships.

The first success achieved by a catapaulted Sea Hurricane was on 3 August 1941, when Lieutenant Robert Everett, RNVR, of No. 804 Squadron, Fleet Air Arm, was fired off the 8,000-ton ex-banana boat HMS Maplin. This CAM ship was covering homeward-bound convoy SL81 from Sierre Leone and a Condor was sighted 400 miles out from Bordeaux. Afterwards Everett reported: 'I got within 13 miles of the Focke-Wulf before it seemed to notice my presence. I intercepted it after nine minutes' flying and ranged alongside at 600 yards and slightly above it. When my machine was slightly ahead of its starboard quarter the stern gun opened fire. These rounds passed underneath or fell short of the Hurricane. It took quite an appreciable time to get abeam and the for ard gun was also firingagain the rounds passed underneath or short. The Focke-Wulf then turned sharply to port, but seemed to change its

∆The civil lines of the FW
Condor, broken only by rear
and forward dorsal turrets,
show in this upper threequarter view of the aircraft.

⇒ With five Allied shipsinkings and 18 raids
over England in its log,
and displayed proudly on
the tailfin, this Condor
had had a so-far quite
successful war.

mind and turned back on its original course. By this time I had reached its starboard bow and three machine guns opened up, as well as the for ard cannon. I did a quick turn to port and opened fire just abaft the beam. I fired five-second bursts all the way until I was 40 yards astern of the enemy. Another short burst at this range and my guns were empty. I noticed pieces flying off the starboard side of the Focke-Wulf and it appeared to be alight inside the fuselage. I broke away to port at 30 yards. My windshield and hood were covered with oil and I quickly jumped to the conclusion that my engine oil system had been badly hit."

In fact, although Everett had no way of knowing it at the time, the oil had come from the Focke-Wulf which had been crippled by his fire; shortly afterwards the bomber went into a steep dive and crashed into the sea without survivors. The Condor's 2,000 gallons of fuel left a \(\frac{1}{2}\)-mile slick 10ft wide.

Some 50 merchant ships were fitted with rocket-assisted catapaults, but several of these were sunk by U-boats and most of the remainder were not confronted by Condors and so never had the chance to fire off their Hurricanes. The catapault-launched fighters destroyed five Condors, one as late as 1 November 1942, though their morale effect on both sides was far greater than this meagre score might suggest. The real answer to the Condor—and to U-boats as well—

A Fokker





The threat of the Condor forced serious measures from the Allies. 'Instant' fighter cover for convoys was provided by Sea Hurricanes being catapaulted from CAM merchantmen.

was the small escort carrier. These appeared in increasing numbers from September 1941. Three FW200s shadowing convoy HG76 on 18-19 December were damaged and one shot down by fighters from the first such carrier, HMS Audacity, the ex-German liner Hannover.

During the summer of 1941 the improved C3 version of the Condor began to roll off the Focke-Wulf production lines. This aircraft had a slightly strengthened airframe and was powered by four BMW 323 engines which developed 1,200hp for take-off. It carried a maximum bomb load of 4,600lb with a new Lofte 7D bombsight. Gun armament comprised a 20mm cannon firing forwards from the ventral gondola, a 13mm MG firing rearwards from the dorsal position, and single 7.9mm MGs in the front turret, each of the two waist gun positions and the rear of the gondola. The C3 had a maximum take-off weight of 50,000lb (22.3 tons) and had a top speed of 224mph; its normal operational range was 2,200 miles, cruising at 158mph.

Improved version was to late

Although a great advance over its predecessors, the C3 Condor came just too late to be really effective. By late 1941 the old-style low-level attacks on convoys were becoming increasingly hazardous. As more and more ships became armed, the German crews began to restrict their attacks to those occasions when they could achieve an element of surprise. The Condors would stalk the convoys, dodging from cloud to cloud; when the crew judged conditions favorable, they would sweep in for a snap attack. The bombers would run in, somewhat higher than before, dropping their bombs at the first ship that presented itself and then make a hasty getaway. Obviously such hastily executed attacks were considerably less effective than the earlier ones had been. Yet in spite of these precautions German losses began to rise alarmingly.

Now the Condor's real limitations began to manifest themselves. For the fact that while the converted airliner could dish out punishment, even the strengthened C3 version could not afford to take it. The rather frail structure, the fuselage stuffed with tanks for the extra fuel necessary if the evasively routed convoys were to be found, both meant that the aircraft could not stand much in the way of battle damage. The Condors began to fall as comparatively easy prey when they themselves came under fire.

Clearly the Condor had shot its bolt as an anti-shipping aircraft by 1942. But the Luftwaffe was experiencing con-

siderable trouble with the Heinkel 177 heavy bomber intended to replace it; the Condor, an improvisation in the first place, had to soldier on with KG40. A few FW200s even went to Ju88 equipped anti-shipping units in Norway and Sardinia. Further improvements to the bomber, increased defensive armament and the fitting of radar to assist in finding convoys, did little to increase its effectiveness. During November 1942 KG40 had about 30 Condors on strength, of which about 10 were serviceable at any time, Lacking an effective long-range attack aircraft, General Kessler, the Fliegerfuhrer Atlantik, described his forces as but a 'living corpse'.

The Condor continued in the anti-shipping role, carrying out sporadic operations until mid-1944; successes were few and far between. The KG40 staffel permanently left at Trondheim-Vaernes in Norway flew missions over Icaland and to within 40 miles of Greenland, but never attacked Arctic convoys, merely calling in the ordinary bombers. From late 1942, as Germany was thrown increasingly on the defensive the Condor saw increasing use in the transport role. Following the German defeat at El Alamein in November 1942, and the imposition of an Allied naval blockade in the Mediterranean, the fuel position of Field Marshal Erwin Rommel's Afrika Korps became desperate. The Luftwaffe was called in and operated an airlift to fly petrol from Crete to Libya. Together with Junkers 52s of the normal transport units, the Condors of KG40 were able to fly in some 250 tons of motor fuel per day which did much to sustain the orderly German retreat out of Egypt and Libya.

Fifty per cent losses in Russia

No sooner had the Mediterranean airlift ended than the Luftwaffe found itself involved in a vastly greater operation to supply the 330,000 men of Sixth Army cut off at Stalingrad in the Russian winter of 1942. Eighteen Condors of KG40 were sent to take part in the Stalingrad airlift, but after some initial successes the fierce weather conditions and the primitiveness of the airfields began to take their toll. By the time the vain airlift ended, half of the Condors had been lost either in accidents or as a result of enemy action.

Throughout the war a handful of Condors, never more than four at any one time, maintained Lufthansa's passenger services to Portugal, Spain, Switzerland and Sweden. The last commercial flight, Berlin-Barcelona, was flown as late as 14 April 1945. One Condor, the FW200 V3 Immelmann III. served as the personal transport of Adolf Hitler. The Fuehrer had a special armored seat with a parachute built into the upholstry but ready for immediate use. The seat itself was mounted over a specially built trap-door cut into the bottom of the fuselage. The system was rigged so that, having strapped on his parachute, the Fuehrer could pull a lever to jettison the trap door after which his seat fell through the hole and the parachute opened automatically. But Hitler's Condor performed reliably and this unusual escape system never had to be used.

Condor production virtually ceased by the end of 1943; the last seven FW200s, designed to carry two Henschel 293 missiles which they never used, were delivered by February 1944, to bring the number built to 268. With the virtual demise of the German bomber force in the summer of 1944, following the wrecking of the German oil industry by Allied bombing, the surviving Condors were either grounded or sent to the few remaining operational transport units. The career of the flimsy hunter was over.

Alfred Price

CANTIGNY 1918

The raw 28th US Infantry Regiment took this small village with 21 per cent casualties

At the end of 1917 World War I was a little over 40 months old. Both combatant alliances were close to the limits of exhaustion. Of the Central Powers Bulgaria and the Ottoman Turkish Empire were on the point of collapse; Austria-Hungary had to rely to an ever-increasing extent on German help to bolster her flagging armies, Germany herself had had to withstand major Allied offensives on both the Western and Eastern Fronts. Of the Allies, Italy had suffered almost catastrophic defeat in the Battle of Caporetto, and had been forced to call on France and Britain for help they could ill-afford to give. France was still suffering from the disastrous effects of the 'Nivelle offensive' of April, whose failure had led to widespread mutinies in the French Army. Great Britain had been forced to bear the brunt of the war on the Western Front since the French collapse, and had suffered enormous casualties in the Third Battle of Ypres-Passchendaele.

Despite all this, both sides looked forward to the new year with some optimism. The US had entered the war on the side of the Allies in April 1917. By the beginning of 1918 her armies were arriving in Europe in increasing strength, their enthusiasm undimmed by years of war. Germany also had hopes for 1918. Bolshevik Russia, having withdrawn from the war after the Treaty of Brest-Litovsk, Germany could deploy the bulk of her forces hitherto allocated to the

Eastern Front in other sectors.

Now more than ever the dominant party of the Central Powers, Germany was under the firm control of Field Marshal Paul von Hindenberg, Army Chief of Staff, and of General Erich Ludendorff, First Quartermaster General, They fully realized the implications of the American presence in Europe, A large US Army would alter the military balance on the Western Front decisively in favor of the Allies. Therefore the war had to be won quickly. So Ludendorff, the brains of the High Command, decided to risk everything on a series of decisive offensives before American strength had sufficiently built up. For the first time since the opening campaigns of the war, Germany enjoyed manpower superiority. Ludendorff resolved to use these to split the Allied line, dividing the French, with their prime interest in the defense of Paris, from the British, who concentrated on defending the Channel ports-vital for their supplies and reinforcements. Once the two major Allies had been physically split, Ludendorff expected to be able to mop up the British and then turn his attentions to the French in the unlikely event of their refusal to capitulate.

German preparations were thorough, and undertaken in great secrecy. The key to the offensives, which eventually totalled five, was complete tactical surprise and the use of new tactics. These had been evolved on the Eastern Front

Men of the American 28th Infantry Regiment wait under cover near Cantigny. The attempt to capture Cantigny was to test the Americans in action. It had only tactical value but its capture would greatly boost Allied morale.



Carligny



by General Oskar von Hutier, now commanding the Eighteenth Army in France, and were based on infiltration rather than head-on confrontation.

The first German drive, the Somme offensive, was launched on 21 March 1918, and at first met with total success. But by the end of the month the Germans had lost momentum. Ludendorff called off the attack on 5 April. The German gains had been substantial, and the new front line now comprised a great salient 50 miles wide and 40 miles deep into the Allied center. The offensive also gave the Allies two advantages: first, the negative one of warning them of German strategy for the immediate future, and secondly, the positive one of forcing them to appoint an overall commander for the Western Front, in the person of General Ferdinand Foch.

The Somme offensive had been finally brought to a halt just to the west of Montdidier, with the front line running through the tiny village of Cantigny, which before the war had boasted a population of 200. The village and its environs occupied the high ground dominating the country to the west and south-west. Its position was of considerable importance to the Germans.

The village buildings provided excellent artillery observation posts, and the surrounding woods good cover for the 90 German artillery batteries that were soon moved into the area. These batteries had an important role to play in German plans—for after a relatively unsuccessful drive against the British in Flanders (along the Lys river in April), Ludendorff was now planning a third major offensive across the Aisne river and towards Paris between the Oise and Marne rivers. This Aisne offensive—to be mounted by

General Bruno von Mudra's First Army and General Max von Boehn's Seventh Army—was intended as a diversion to a renewed German onslaught against the British in Flanders, and would extend the salient formed by the Somme offensive southwards. The batteries around Cantigny would be well placed to destroy Allied efforts to halt the right wing of the Aisne offensive, scheduled to start on 27 May.

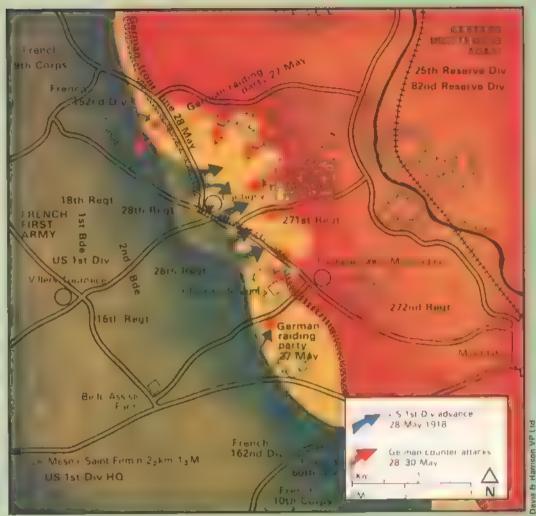
As the US was technically not an ally, but rather a cobelligerent of the Allies, General John J. 'Black Jack' Pershing, commanding the American Expeditionary Forces (AEF), had for some time been resisting Allied efforts to integrate American divisions as they arrived into British and French armies. Instead, he wanted to launch them into battle as wholly American armies. Nevertheless, during the crisis of the Somme offensive, Pershing had offered to lend the Allies the eight divisions that had arrived in France to help stem the German advance. The offer was gratefully accepted, and the US 1st Division was ordered into the Picardy region to help General Marie Eugene Debeney's French First Army, exhausted after halting the advance of Hutier's Eighteenth Army. By 23 April the 1st Division was in place west of Cantigny, between the French 9th and 6th Corps. (American divisions had a nominal strength of 28,000 men, formed into two infantry brigades each of two regiments, an artillery brigade, an engineer regiment, a machine-gun regiment and logistics services, Each division was therefore equivalent in strength to a two- or threedivision British or French Army Corps, whose numbers by this stage in the war usually totalled little more than half their establishment strengths.)

The US 1st Division, soon to be known throughout France as the 'Big Red One' after its formation insignia of a red figure '1', had started to arrive in France on 26 June 1917. Composed of 1st and 2nd Infantry Brigades (16th and 18th, 26th and 28th Infantry Regiments respectively), 1st Division had been commanded by the able Major General Robert Lee Bullard since 14 December 1917, with the exception of a short period (5-13 April 1918) when Brigadier General Beaumont B. Buck was in command. At the end of April the division had a strength of about 26,500 all ranks. On the eve of Cantigny total AEF combat strength amounted to 406,844 out of 667,000 US military personnel in Europe.

Shelling with HE and gas-shells

On 23 April the 1st Division held the sector between the French 45th Division (9th Corps) and the French 162nd Division (6th Corps), with 1st Brigade's 18th Regiment holding the left-hand half of the line and 16th Regiment the right-hand—2nd Brigade being in reserve. The nationality of the troops opposite Cantigny could not long be concealed from the Germans: Ludendorff had given special orders that once Americans had been discovered in the line, they were to be subjected to immediate shelling with HE and gas shells to test out and possibly break their morale before they became hardened to the realities of trench warfare. On 3 May, for example, the Germans fired over 15,000 rounds of HE and gas shells at the 18th Regiment, causing 800 casualties, 200 of them killed. It was this type of activity that had helped make inroads in Allied formations, but American morale was not significantly affected. The shelling of American troops in the Montdidier area was also intended

Division in their assault on Cantiany, Major General Robert Lee Bullard. By the end of April 1918, his division comprised 26,500 all ranks. On 15 May Major General Vandenberg, the French Commander, ordered Bullard to prepare the assault on Cantiany. The attack was timed for the 28th, Bullard placed Colonel Hanson E. Ely in charge, Elv. a large ambitious man, made no secret of his desire to be a brigadier general and Bullard hinted that all would depend on the success of the Cantigny operation. > Our map shows the US/ French assault and capture of Cantigny on 28 May, and the subsequent German counter-attack. The American 1st Division could probably never have succeeded in taking Cantigny without the aid of French tanks, These were withdrawn to help stem the German Aisne offensive. But the Americans held on.



But the shelling was by no means one-way. The 1st Division's artillery brigade of one 155mm and two 75mm field regiments responded in kind, firing upwards of 10,000 rounds a day in counter-battery fire. But the Germans suffered lightly as they held the high ground and the better concealed positions in the woods on either side of Cantigny.

Major General Vandenberg, the local French commander, was highly impressed with the bearing and conduct of the raw American troops now under his command. On 12 May he informed Debeney that he thought the Americans ready for offensive action. As this would be the first time that US troops had launched an offensive, Vandenberg thought that they should be given a relatively easy objective, but with some tactical importance. Debeney accepted Vandenberg's recommendation, and on 15 May ordered Bullard to capture Cantigny, that thorn in the side of his division. Debeney's thinking was sound. The objective had little but tactical significance. Should the Americans lose, not much harm would have been done; should they win, it would be a boost for French morale, and useful for the Allied propaganda campaign against Germany.

The day chosen for the assault was 28 May—one day after the date scheduled by the Germans for the start of the Aisne offensive, though neither the French nor the Americans knew it.

Bullard had 13 days in which to prepare his plan and his men. The unit chosen for the honor of leading the first American offensive of World War I was the 28th Infantry Regiment, commanded by Colonel Hanson E. Ely. Ely was a

large man—weighing 220lb and 6ft 2in tall. He had a stentorian voice and enjoyed his reputation as a 'hard' man. One of his more noticeable eccentricities was his habit of flexing the muscles at the corners of his mouth. Ely had been one of the first Americans to arrive in France during 1917, when his job had been to organize the AEF military police. He then became Chief of Staff to the 1st Division. Ambitious, Ely constantly pushed his claim to elevation to the rank of brigadier general, and with it command of one of the division's infantry brigades. Bullard was sufficiently stubborn a man in his own right to refuse the promotion Ely craved, giving him instead command of the 28th Regiment. With the selection of this unit for the assault on Cantigny came an implicit promise of promotion—if the operation were successful.

Air support for the attack was limited, and provided by French aircraft. But detail planning before the assault was excellent and French photographic-reconnaissance machines were able to secure good photographs of the objective, which the Germans had fortified in their usual thorough way. Engineers found a similar piece of ground behind the front and built a replica of the German defenses there. Five days before the attack, the 28th Regiment moved back and practised on this mock-up—learning as much as possible before the real thing.

Although American formations had provided a great fillip to Allied morale when large numbers of fit and keen young men began to file down the gangplanks from their troopships, and although it was realized that the new forma-

tions would be a great asset, it should not be supposed that M1918); 8mm Hotchkiss M1914 MGs; French artillery and the Americans were entirely the answer to the Allied prayer. The men of these large and potentially powerful forces were inexperienced, and in time would have to face some of the most hardened and able defensive troops in the world. Also, the material of the American forces was very far from perfect. -although each man's personal clothing was of first-rate American quality, production of offensive weapons in the United States was taking far longer than had been hoped, so much equipment for the 'doughboys' had to be found from European sources.

Thus American infantry units used US Colt .45in M1911A1 automatic pistols: Springfield .30in M1903 rifles and Browning .30in M1917 MGs; French CSRG 8mm (.315in) 'Chauchat' M1915 light MGs (from 1918 this type was also made in .30in calibre for the Americans as the

flamethrowers, and British trench-mortars and granades. This all made supply very difficult, and it is greatly to the credit of the 1st Division's Assistant Chief of Staff, Lieutenant Colonel George C. Marshall (US Army Chief of Staff in World War II), that supply difficulties caused so little trouble for the 1st Division.

For the Cantigny operation, the French supplied both flamethrowers and their operators for the central assault battalion, which was to take the village itself whilst the two flanking battalions protected it from German envelopment. One of the major objectives of the attack was to take prisoners, and it was anticipated that the threat of flamethrowers in a fortified village would induce many Germans to give themselves up rather than risk incineration. Should the Germans fail to surrender, the flamethrowers would keep down American casualties.

The French also supplied 12 Schneider tanks and their crews. The German formation defending Cantigny, 82nd Reserve Division under Lieutenant General Graf (Count) von St. Ange, had not faced tanks before, and had no AT guns. It was confidently, and correctly, expected that the appearance of tanks would greatly confuse and confound the defense. To strengthen the US artillery support for the attack, the French supplied an additional 132 75mm guns and 36 155mm weapons to the American artillery brigade, commanded by Brigadier General Charles Summerall, of whom it was aptly stated that he 'may be a son-of-a-bitch, but thank God he's our son-of-a-bitch'. Elements of six artillery regiments were allocated by the French to support the Americans-178 guns and howitzers, including one 280mm (11in) trench-mortar battery,

On 27 May the 28th Regiment moved up to its assault lines and prepared for the following day's action. But the night was not to pass uneventfully. The Germans had realized that the Americans were up to something, and sent out two strong patrols (over 30 men in each) to bring back American prisoners for interrogation. One of these patrols

¬This doughboy wears a British-type steel helmet and is. armed with a French .30 M1918 light MG and a Colt .45 pistol. A M1905 bayonet is carried on the back.

was caught and wiped out in no-man's land as it made for Belle Assise Farm. The other reached the American lines in the Casablanca sector and after a brisk fight pulled back with one prisoner. The Americans immediately sent a patrol in pursuit, and this caught the German patrol before it reached its lines, rescued the American prisoner and destroyed the German patrol before returning to its own lines. That night's activities, including a German artillery bombardment, cost the Americans 33 casualties. The strength of the German patrols was also intended to persuade the Allies that the offensive in the Chemin-des-Dames area along the Aisne, which had started that morning, was to be extended to the Montdidier area on the 28th. The intensive artiflery bombardment was also intended to contribute.

That night's German activities failed to disorganize the

American preparations, and early on the morning of 28 May all was ready. During the night 1st Engineer Regiment and 18th Infantry Regiment had dug two lines of trenches in front of the American lines. One was a fairly obvious, but dummy, position which it was hoped the Germans would take for the jump-off line and therefore shell. The real position was well concealed and less than 300 yards from Cantiony, which was the actual jump-off line.

At 0445 the guns under the command of Gen. Summerall started to register on the German lines, and 30 minutes later the combined French and American batteries supporting the attack unleashed a general barrage. In the infantry trenches commanders went through a final check of their men's equipment, and issued last-minute instructions. Then the assault wave, accompanied by its light trench-mortar batteries, moved up to the jump-off line, ready for the assault at 0645.

Machine-gun regiment moves up

As this attacking wave made its last preparations, the standard defensive precautions were being taken: the artillery of the two flanking French divisions took up a bombardment of the German positions, with special emphasis on their flanks to prevent German reinforcements moving up. French MG crews also moved up to provide flank protection for the 28th Regiment; at the same time 1st Division's MG regiment of three battalions also moved up to give fire support, as did the organic MG companies of 16th and 18th Infantry Regiments. An estimated 100,000-roundsplus was fired by each company in the following 48 hours.

At 0645 the general barrage ceased, to be replaced by a rolling barrage starting 100 yards in front of the American line. This barrage moved forward 100 yards every two minutes—giving the men of 28th Regiment plenty of time to keep up with it.

Ely's attack plan called for an assault by battalions in one wave. The center battalion had the task of clearing Cantigny itself before advancing beyond the village to form a defensive front to the left-center of the objective. All went well, with the left of the battalion passing to the north of the village and the right clearing the village itself for few losses Nearly all the Germans in the village were wounded or killed, with the exception of a party on the southern edge of the sector, who took cover. They emerged as the battalion was passing and raked its right flank, wiping out most of a platoon before being destroyed.

Remorseless advance

The left-hand battalion, which had the support of the 12 French tanks, moved forward remorselessly and fulfilled its mission of linking the center battalion with the French 152nd Division, which had replaced the 45th Division, on the north flank of the attack. Casualties were very light

The right-hand battalion had the job of linking the center battalion with the French 162nd Division on the south flank. After encountering delays as a result of a ravine in its path, the battalion achieved its purpose with few casualties.

So far everything had gone like clockwork. By 0720 all the objectives had been taken, while only a few men had been lost. The second wave now moved up to help consolidate the new positions, and turn the German trenches round to meet the inevitable counter-attack. Huge quantities of barbed wire were needed, and these were efficiently brought up by Col. Marshalf's supply trains. Signallers moved in, and soon Ely was in touch with all his battalion

commanders by telephone. Protection for this phase of the operation was provided by a French and American box barrage round the newly won positions, 2,400 yards wide and 1,750 yards deep.

Such had been the speed and vigor of the American attack and consolidation that the Germans did not fully realize what had happened. The first probing advance at 0800, by about 50 men, was caught in the open and cut down by American rifles and MGs. At 0930, a hundred Germans mounted a second push. They fared no better-all of them being cut down before they reached the American lines. But the Germans now knew more precisely the strength and dispositions of the Americans. The German formation holding the sector, the 82nd Reserve Division, and its supporting formation, the 25th Reserve Division under Major General von Mohn, were not suited for such difficult work as counter-attacks against the top-quality troops of 1st Division. While Cantigny was of only tactical importance to the Allies, it was of considerable strategic significance for the Germans. Should the Americans hold it, their artiflery might be able to shell the German advance beyond the Aisne The Americans must be counter-attacked and driven

By 1000 the Germans had sent over reconnaissance planes to spy out the American dispositions, and started shelling the new defense lines. The 271st and 272nd Reserve Regiments, which had only just been relieved in the line, but which had not even reached their rest areas, were ordered to stand by for a counter-attack. They were in poor shape to do so, some companies being down to 70 men (a full-strength US company numbered six officers and about 250 men).

Heavy losses, especially of officers

Also at 1000 hours Marshall arrived to inspect the preparations. He telephoned Bullard to say that all seemed to be going well. Ely's 3,900 men had suffered only 300 casualties. The Germans had lost about 800 dead and 200 prisoners, most of them wounded. Besides his own regiment, Ely could draw on another 2,500 men from 18th and 26th Regiments for the defense of the area. Seeing the ground, Marshall formed the opinion that the German counterattack would probably come on Ely's right flank. His impression was confirmed by French reconnaissance on his return to divisional HQ at Le-Mesnil-Saint-Firmin. Just after Ely had informed his brigadier, Beaumont Buck, that all was well. Marshall telephoned Ely to tell him to watch for counter-attacks from the north (Bois de Framicourt), east (Fontaine-sous-Montdidier) and south (the park of the Chateau de Jenlis), although this last was the most likely. It was at about this time, 1430, that the German artillery bombardment intensified, causing increasingly heavy casualities amongst Ely's men. One company lost all its officers and one in three of its men, and other units suffered heavy losses, especially of officers. Ely's position was now further endangered by the removal of the French tanks, aircraft, and artillery, all of which were desperately needed to stem the Germans' Aisne offensive. The only protection 28th Regiment now received was from Summerall's artiflery, which was ordered to keep up an interdiction barrage around the German concentration points throughout the night.

St. Ange, extremely annoyed at the time that Colonel von Friedrichs of 272nd Reserve Infantry Regiment was taking to prepare his major counter-attack, had meanwhile

Men of the 28th Infantry Regiment, 1st Division, advance from their line on Cantigny. The man climbing out of the trench in the center foreground is armed with a Vivien Bessier rifle grenade Note the French tank on the skyline An aerial view from 1,640ft of the devastation on the outskirts of Cantigny village—28 May 1918.

t - The Americans enjoyed superior medical services to any other army in World War I. Here, an injured soldier is wheeled to the rear at Cantigny on 28 May 1918.





American and French troops mopping up dugouts in Cantigny on 28 May 1918. They were supported by French tanks which unnerved the German defense. One French soldier is carrying a flame-thrower canister on his back

arrived behind the German front line to reprimand his subor. All were beaten off by Ely's men, but in the process all dinate. Major Herzberg, who was now to lead a counterattack at 1800, asked for and received heavy trench-mortar bombardment of the American second line from 1500, to seal the American front line from support. At 1800 the 272nd Reserve Infantry Regiment's counter-attack proper went in three waves, supported by light trench-mortars. The first wave was preceded by small parties with bangalore torpedoes to blow gaps in the American wire. All these parties were destroyed before reaching the wire. A few of the first wave reached the American lines before being cut down, but none of the following two waves managed to do

By now the front line was little more than shell holes, but the Americans still stood firm. The divisional MG commander, Lieutenant Colonel A. S. Bowen, reported; 'The line in front of Cantigny probably lost. Our troops to counterattack when barrage starts.' This was not needed, however. Ely himself reported to Buck: 'Two officers left in one battalion. All men in one company gone but 12.1

Throughout the night the German artillery bombardment, now under the personal direction of the German Corps commander, Lieutenant General Graf von Watters, continued it merciless pounding, with a multitude of 77, 105, 150 and 210mm guns. The next day St. Ange launched three more counter-attacks similar to the last one on 28 May.

American reserves had been used up. In the morning of the 29th Ely reported: 'Front line pounded to hell-and-gone, and entire front line must be relieved tomorrow night or I will not be held responsible."

Elv and his 28th Regiment had all but shot their bolt fortunately for them the Germans were even closer to total exhaustion, and could not launch another counter-attack on the 29th. During the course of the night the 28th Regiment pulled out of the line, its place being taken by the fresh 16th Regiment. The Germans, ignorant of the change, launched a last counter-attack next day, but this was beaten off with ease by the men of the 16th Regiment. The battle for Cantigny was over, with the Americans firmly in control.

The 28th Infantry Regiment had entered the battle with 122 officers and 3,752 other ranks. In a little over 30 hours at Cantigny, it lost 187 men killed and 636 wounded. Had it not been for the sterling work of the medical services under Colonel James Irving Mabee many more of the wounded would finally have been listed as dead. Casualties amounted to a little over 21 per cent of the Americans committed, but despite this the Americans had taken and held a position against determined German counter-attacks, an event that promised well for a future in which large American formations would fight on the side of their British, French and Christopher Chant Belgian allies,

Tiny warships which rolled viciously in the cruel seas of the Atlantic to escort harassed Allied convoys

HM Corvette Begonia pointed her salt-encrusted bow westward once more. Her crew, most of whom had been engaged in peaceful occupations only a year ago, were settled down to their almost continuous life at sea. Begonia was a member of an escort group operating in the Western Approaches. Her job was to protect her big sisters from the threat of enemy aircraft or the U-boat. These ships of the merchant service, many with unpronounceable names, were loaded with all the vital supplies to feed and maintain Great Britain in the struggle against the Axis

To date, Begonia had not been able to claim any sure kills, but she had shown her teeth on more than one occasion. She was still operating and many men were eternally grateful to her for rescuing them from the cruel seas of the Atlantic.

A Flower-class Corvette, Begonia was the product of an emergency war design and the result of the skill of the smaller British ship-builder who could turn their hands to anything. Job number 664, built by Cook Welton & Gem-

mell Limited of Beverley, Hull (now Charles D. Holmes & Co. Ltd.), was the result of an order placed for 26 of these new escort vessels on 25 July 1939

Begonia was named after an earlier convoy sloop, built for World War I, She was laid down in April 1940 during the Norwegian campaign, launched on 18 September 1940. and completed on 3 March, a building time of less than 11 months.

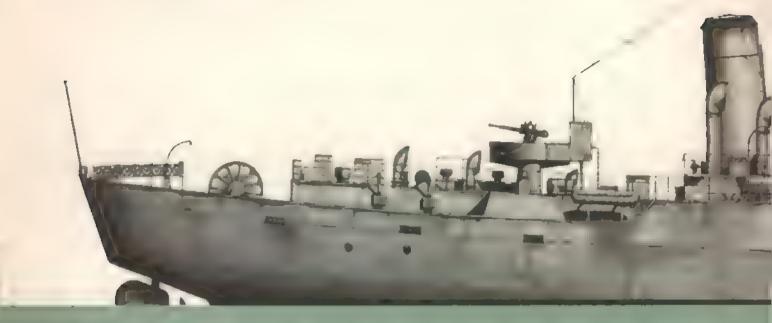
Not large by any standards, Begonia steamed toward convov HZ163 to meet her sister-ship Dahlia. It was 15 December 1941 and sea conditions were typically uncomfortable. The messdeck forward stank of wet oilskins and sea water Most of the crew had become used to the ship's vicious roll, but with the galley fires out, only soup, corned beef sandwiches and hot sweet tea, were available for those who could keep it down.

HMCS Moosejaw, K164, shared the sinking of U501 on 10 Sept 1941 with another Flower HMCS Chambly.



HMS BUTTERCUP

Laid down as Job. No. 3548 on 10 April 1941, Buttercup took 16 months 7 days to build, being completed on 24 April 1942 at Harland & Wolff shippard, Belfast She was fitted with LL magnetic-sweeping cables (note drum at stern), and an 'A' bracket over the bows carrying the 'acoustic hammer' for the detonation of acoustic mines ahead of the ship.



The effect of the roll in the machinery spaces was just as severe. Stokers filling the oil pots risked crushed fingers. or worse, as they tended the bearings of the single. quadruple motion, steam reciprocating engine. The four pistons each traveiled 30 in as they worked to dove the ship. nto the flage waves. The four cylinders of 181 in, 31 ii. and two of 38 in diameter produced 2,750 (indicated) hp at full power. Steam at 225th psi was supplied from the two cyundrical oil fired hoilers, tended by the engine-room crew's colleagues in the builer room forward. In the engine room the chief kept his eye on the engine revs las we cas everything else. Occasionally the stern would lift out of the water as the bows descended into a frough. The properer releved of its load would race, and the chief would easo the throttle shift to reduce the strain and slow down the speed of the oll fuel pump as the boder pressure increased due to the crosing of the throttle.

Bodies and spirits dampened with spray

On the upper deck the bridge crew ducked as ice cold spray covered them. Freezing water somehow passed through the layers of scarves and towels to dampen both bodies and spirits as *Begoni's* steamed at a steady 10 knots to return hericharges to the port of Diverpoor

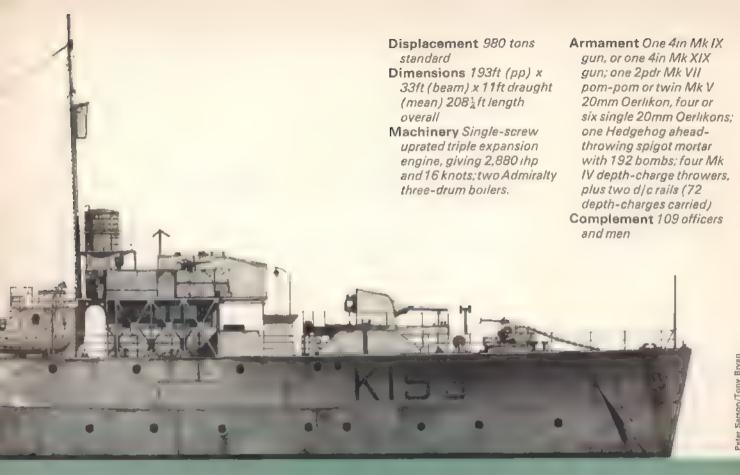
Begania's armanient was unmanned and her seamen sheltering from the weather were on standby ready to go into action should the need arise. Her old single 4m Mk IX gun forward had been dosigned for use in the old Aberdare-class minesweepers of World War I. Few refinements were fitted, the gun was for surface action only it had 30 elevation, and a maximum range of 13,700 yards (7,7 m les). Any U boat cought on the surface was in for trouble Begonia's gunners were ready to use any number of the 100 rounds carried. Back att the single 2pdr point-point was capable of adding the weight of its 11brpm to help with the

destruction of any surface or air target that presented itself. Aft again, the quarterdeck party were standing by the loaded depthcharge rails, and four DC throwers.

On the bridge, an asdic (sonar) operator was continually sweeping for U hoats. Any U hoats about in this area would either be lying deep in order to gain some protection from the big waves or running very uncomfortably on the surface. Itiying to intercept the same convoy that *Begonia* was on the way to protect.

The bridge lookouts searched the sea and sky through their binoculars. On the bridge wings two 303in Lewis MGs were further additions to close-range AA defense. But even the miserable weather did not blot out the crew's thoughts that on returning with this convoy. Began is was to undergo a refit at Londonderry in Northern Ireland Prospects of leave and a rest from the sea helped lift the gloop.

Beginna was active in the Atlantic during 1941. In March. she was on her way to rendezvors with convoy EN426. when she was warned by radio, that enemy Elbouts were expected in her vicinity. On 4 May she Lad picked up the survivors of the merchant, ship Tarangez, sunk the previous day and had found 17 men in another ship's boat. On the 5th she was with the Wiccass World War I destroyer Wowerme, on her way to meet convoy HX123, and was able to transfer the survivors from her overcrowded messdecks. HX123 was attacked by U110 and U201. The first sank two ships but the subsequent attack by the escorting corvette Aubriet a forced her to the surface. A boarding party from the destroyer Ballday attempted to tow the stricken U-boat. to Idefund but after the removal of secret papers, a code machine and other documents. U110 sank. The other escorts, the destroyer Amazon, and corvettes Nigella and Hallyhock, were unable to stop U201 from sinking one ship. and damaging another although she was damaged by a



near miss from one of the corvettes

Just before midnight a few days later *Begonia* was off Bloody Foreland, Ulster, where she dropped a pattern of charges on an oil patch believed to come from a U-boat but no confirmation was made.

A memorable trip took place in July when *Begonia* went south with convoy 0G69. Eight U-boats had attacked and destroyed seven ships, totailing 11,303 tons. *Begonia* picked up 49 survivors from the *Lapland* and *Norita*. Including the convoy commodore and his staff. They were dropped off at Gibraltar, where the ship had refuelled.

Survivors often beyond help

Begonia was part of the escort for HG73 in September 1941 They had been warned that at least three U boats shadowing the convoy, which for the first time had an escort carrier (HMS Audacity) to give close air-cover. The escorts were the sloop Deptford, and the corvettes Begania, Arbutus, Pentstemon, Mangold and Penwinkle. The convoy was spotted by the enemy SW of Ireland, and although one U boat (U201) was forced to dive during attack by aircraft from the carrier, U124 kept contact. A scattered group of four merchant ships diverted some of the main escort including Begonia and three of the four were torpedoed She ended up with 37 survivors to swell her complement Her ship's company were used to giving first aid to scalded stokers and men with lungs poisoned by fue, oil as well as comfort and clothing. But survivors were often beyond help Begonia teamed up with Dahlia and Montbietia to return home

On 12 December Begonia steamed into Londonderry harbor for her refit and returned to the fray on 6 February 1942. With the entry of the US into the war the German U-boat Command was presented with a vast new target area—the Eastern seaboard of America, as well as the

Cambbean As a result the enemy submarines took advantage of the thinly spread American escorts, which at that time lacked the skill and operational experience of their Royal Navy counterparts. Unescorted US cargo ships and tankers were sunk in large numbers. Ten *Flower*-class corvettes were hurriedly transferred to the US Navy. A further 14, which were being built for the Royal Navy in Canadian shippards, were to be transferred on completion (In fact the US Navy only took eight, the remainder reverted to the Royal Navy.)

Begona was one of those 10 corvettes on loan—a kind of Lend Lease in reverse. She became USS Impulse (PG68), under the command of Lieutenant Commander M Lyons USN on 16 March. The corvette left Londonderry under her new ensign on 15 April 1942. Arriving at New York on 4 May she steamed to Norfolk Virginia starting a regular routine of escort duties from that port to Key West, Florida She returned to New York in August 1942 to do duty protecting the important supply line between there and Guantanamo Bay. Cuba. Impulse remained on this job for the next three years.

On 6 July 1945 Impulse arrived at Boston Massachusetts, for return to the Royal Navy. She left Boston on 1 August, and arrived at Harwich on the 15th. She was decommissioned on 22 August and finally sold out of service on 22 July 1946 to serve with a number of civilian companies.

The evolution of the *Flower*-class corvettes began in World War I when the Royal Navy fought the U-boats for the first time. In both world wars there was an acute shortage of warships for escort and anti-submarine duties. This was resolved in late 1914 by utilizing the efforts of a multitude of civilian shippards in Britain. A special committee had been appointed to design a warship capable of combining a number of duties. These were to include minesweeping, general service, the transport of men and materials, towing,

41



A war compansion between the Flower class corvette HMS Buttercup and a cargo-vessel Pacific Ref ance of 6.717 tons sunk in 1940. The corvette's length of 208lt meant that her short hull would not fit the Atlantic wave-pattern.

and a multitude of other chores.

The design was to be simple and use common mercantile practice with regard to the hull and machinery. Standard Admiralty fittings would be used, and every effort was to be made to build these new ships speedily without involving specialized yards engaged in warship construction.

The policy proved successful with over 80 ships of the new design being authorized. Building times of only 19 to 21 weeks were achieved and the Royal Navy obtained a large number of very useful craft. These ships were known as Sloops or Convoy Sloops and they were all named after the flowers of herbaceous borders. So Acacia, Anemone, Aster, Dahlia, Foxglove and so on came to be included in the list of ship names as used by the Royal Navy, The first Begonia completed on 9 October 1915 was an early Q-ship. Two basic designs were evolved, the early units having two funnels, and the latter classes only one.

These ships served with considerable distinction in World War I, but between the wars they were sold out of the service or scrapped with only three (Foxglove, Lupin and Rosemary) remaining in service by 1939.

Search for suitable substitute

With the war clouds gathering in the late 1930s the British Admiralty's problem was to find a suitable, more numerous substitute for the costly sloops of the Black-Swan-class and others, and the turbine-powered coastal escorts of the Kingfisher-class. Plans were needed for a larger and faster warship than the coal-fired trawler.

This was first raised by the Chief of Naval Staff on 2 January 1939. A design was required that could be produced in considerable numbers, at a reasonable cost, which would give a seaworthy vessel, of good maneuverability and endurance, reasonable watertight sub-division, and good asdic operation. The ship had to be able to be built in yards not normally engaged in naval construction. All equipment would have to be standard so that it could be operated by the multitude of reservist ratings required to man the new ships.

William Reed OBE, of Smith's Dock Co. (Middlesbrough, Yorkshire), the company that had designed the 'Z'-class whaler during World War I, was consulted. A new design was drawn up based on a larger version of their new whaler, Southern Pride, with a number of modifications. The length was increased by 30ft to give a higher speed. Two marine oil-fired Scottish boilers were to be fitted as these could be supplied in about 16 weeks. Water tube boilers would not be available for at least seven months.

The early sketch design was approved on 27 February

This design gave a vessel of about 700 tons displacement, with a range of 4,000 miles, and a top speed of 16 knots. The estimated time for construction was about seven months, at a cost of £90,000 for each ship. Southern Pride's standard machinery was to be duplicated, and a three-blade propeller was fitted.

By October 1939 the new escorts' design had been improved. The displacement had increased to 940 tons (1,170 tons loaded), and they were fitted with the latest Type 123 asdic set. This put them on a par with the contemporary Fleet destroyers. A single 2pdr pom-pom mounting was approved for the class in November 1939, as and when the our was available.

The Ships' Name Committee suggested that the Herbaceous Border names be reintroduced for the class, and the first order for 26 Flowers was placed on 25 July 1939, under the 1939-40 Naval Estimates. Other orders followed during August and the following months. France ordered six to be built in her yards, but with the German conquest of France these orders reverted to the Royal Navy. Only one was completed in France and served as a patrol vessel under German command.

After initial orders for 120 ships for the Royal Navy, the Royal Canadian Navy placed orders for 54 *Flower*-class vessels to be built in Canada during 1940. Other orders followed and the Canadian yards produced 124 units in all, including 15 for the US Navy under Lend-Lease. According to the records, 288 *Flower* corvettes were built.

Design constantly Improved and modified

But it was not a case of a long production-line of identical vessels coming off the slipways. The design was constantly improved and modified. *Begonia* was one of the first orders. The first Canadian orders were all fitted for minesweeping, with a steam winch and mine-sweeper davits on the quarterdeck. The 2pdr gun platform was usually installed ferther aft on the deckhouse, and other equipment was common to other Canadian units.

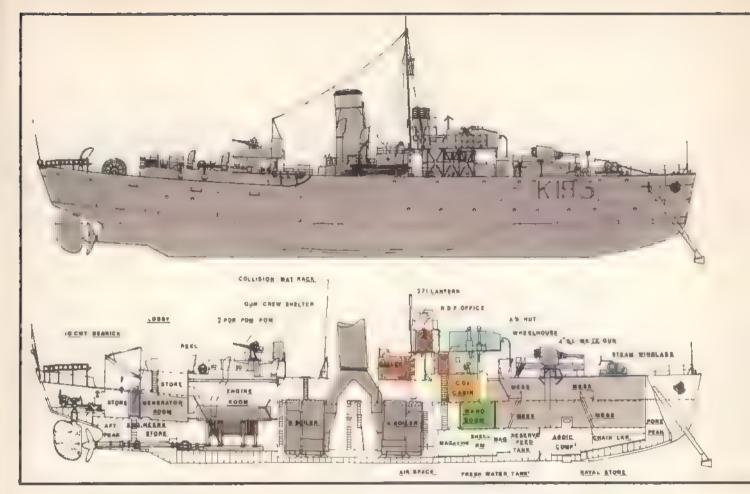
Over a period of time other major changes were made. The first vessels, with slight variations, looked very much like Begonia. Corvettes were designed primarily as coastal escorts, but it was soon found that the few shore-based aircraft drove the enemy U-boats out into the Western Approaches of the Atlantic. Due to the acute shortage of escorts for convoys, the Flowers needed to be where the merchant ships were at their most vulnerable, and it was the normal practice to escort an empty convoy out into the Western Approaches and rendezvous with a loaded one.

The corvette proved to be an excellent sea boat, though



The bridge of HMCS V he decompacture has tax (below) she had an extended for cish, which kept the ship director and the ship and the ship directors converted by the ship is the converted by the ship is the same of the ship and the ship directors are ship in the same of the ship directors are ship and the same of the ship directors are ship as the same of the same





cramped and uncomfortable. The short hull would not fit into the wave period usually encountered in the North Atlantic—which earned the class the cynical comment: 'It would roll on wet grass I'. As escort duties became more extended and longer periods were spent at sea, crews were becoming exhausted. It meant that a larger ship's company than the 48 officers and men then carried was required, making the already crowded conditions worse. This led to the design being modified by extending the fo'c'sle deck aft—providing additional living space and making the vessels more seaworthy.

Other steps were taken to improve the design. Wider bilge keels were fitted, which reduced the rate of roll a little. The hull lines were altered above the waterline to give increased sheer and flare, thus making conditions at sea drier and more comfortable.

Radar introduced in 1941

These modifications, built into ships under construction, could also be installed in corvettes under repair or refit. New equipment was added in early 1941, such as Type 271 search radar (RDF) for escort vessels. Surfaced U-boats could now be detected on the darkest of nights at a range of up to six miles. The wood and Perspex 'Lantern' was fitted on the re-designed bridge.

Another improvement was made to the AA and close-range defense with the introduction of the 20mm Oelikon gun. This slowly replaced the Lewis MGs. Additional radio aids were fitted, and at least five different bridge designs were evolved. The mast was sited aft of the bridge, and the number of depth-charges increased from 25 to 40, and then to 72. From 1942, the forward-throwing weapon

On this and the following page are the internal and external details of HMS Buttercup, a Flower-class corvette as she was in 1942 after having been fitted with LL sweep gear and winches for anti-magnetic-mine operations, The sweep drum and 'A' bracket on the bows necessitated an extra 40 tons of ballast.

'Hedgehog' was fitted but it never replaced the depthcharge as the prime weapon against U-boats.

The modified Flower-class corvette had a slightly longer hull, and incorporated all the improvements. Towing gear was fitted to Gloxinia and Peony for their service in the Mediterranean, and a number of corvettes in that theater had very varied armaments. Others carried the quadruple .5in MG mounting aft, as well as 12pdr guns, and 2pdr Rolls Royce guns.

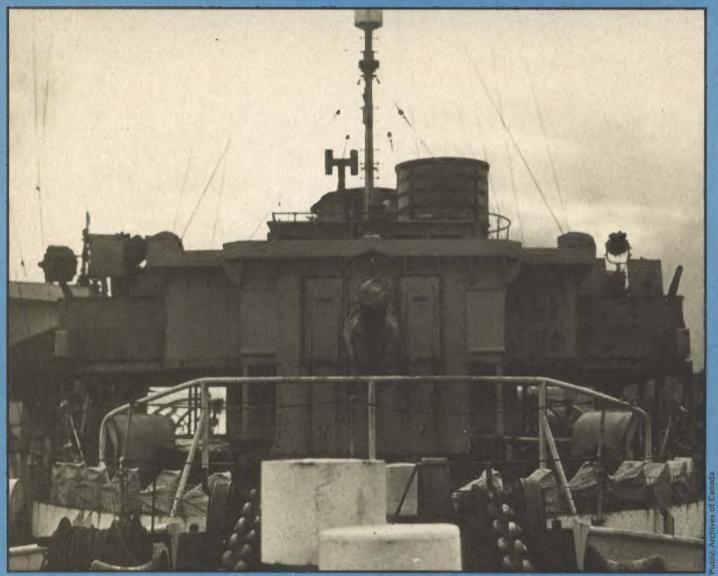
In 1941 eight corvettes were fitted with LL sweep and acoustic minesweeping gear, to help combat the German magnetic and acoustic mines. One of the eight was Buttercup. Carrying 40 tons of ballast to compensate for the increase in weight up top, she was fitted with an 'A' frame, or bracket, over the bows. This held the sound box for detonating the acoustic mines ahead of the ship. The other visible addition was a large drum aft, for stowing the LL magnetic minesweeping cables, which were towed astern when sweeping. The forward ends of the depth-charge rails were removed when the LL magnetic minesweeping cables were running out aft. The Type 271 radar lantern was fitted to port off the center line, with single 20mm Oerlikons mounted on the wings of the revised bridge design.

Buttercup was given the pennant number K193, and commissioned into Section Belge of the Royal Navy and



The Flower-class Vetch K132 With other vessels the same U25.2 in the Atlantic 14 May 1942 and U414 the rest year Buckied plating and missing livets on HMS Dianthas after she said U379 in the North Atlantic on 8 August 1942.

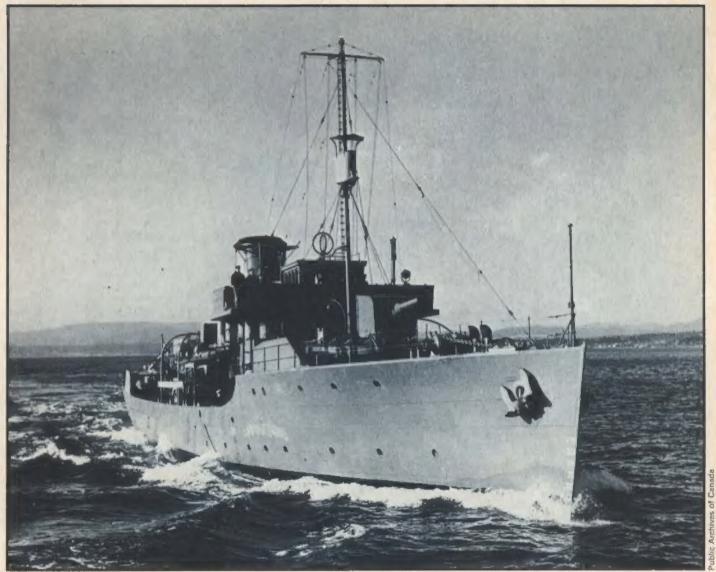




Looking aft along HMCS Fennel. On 6 March 1944 she shared in sinking U744 in the Atlantic with Chilliwack.

A depth-charge being transferred from the SS Lunimetta to the Free French Renoncule, originally HMS Ranunculus.





HMCS Dawson No. 104. Built in February 1941, she foundered at Hamilton, Ontario, on 22 March 1946.

crewed by the Free Belgian Navy in exile in Britain. Other occupied nationalities such as the Dutch, French and Norwegians also manned Royal Navy vessels.

Buttercup was allocated to B5 Escort Group based at Londonderry, Northern Ireland. B5 left on 23 May 1942 with a convoy to North America. On arrival, Buttercup was based at New York as part of the escort and antisubmarine force sent to build up the defenses there. She served in that area for the remainder of 1942, returning to Liverpool in January 1943.

Continuing escort duties throughout 1943, she was engaged as part of the cover for a convoy of 51 ships in March—in company with her sisters, Godetia, Pimpernel, Lavender, Saxifrage, with Abelia and the RCN Sherbrooke joining the escort later. Other larger vessels were also escorting and the convoy was fought through with the loss of 21 ships, totalling 140,842 tons, for only one U-boat destroyed.

Because of the huge losses being sustained it was feared that the convoy system would have to be abandoned. But the larger, more efficient escorts, like the River-class frigates, began to turn the tide. In May 1944 Buttercup was withdrawn for a refit and then went to Sheerness, Kent, in preparation for Operation Neptune, the naval assault phase of the Normandy landings. She later returned to the Western Approaches, joining B6 and then B2 Escort Group the

following August. In November she was ordered to be reduced to reserve at Liverpool. In December the order was cancelled, and she was transferred to Norway as the Nordkyn, the nucleus of her Belgian crew being retained until her takeover. With her new ships' company she returned to the B2 group and the Atlantic until May 1945. On the 13th of that month she sailed for Oslo, to be one of the first Norwegian units to return to the liberated country. Nordkyn later served with the Royal Norwegian Navy until being sold out of the service in 1957.

By the closing months of World War II the *Flowers* had been improved as much as they could. But even with up to six 20mm mountings, they were relegated to the sidelines by the new emergency-built vessels joining the fleet in large numbers. The *Rivers*, *Bays* and *Lochs*, and the improved design of the *Castle*-class corvettes, took the place of the *Flowers*. With the end of the war they vanished from the lists of the Royal Navy, to be sold to commercial interests and small navies.

Although an emergency design, capable of improvement, the Flowers gave sterling service in the Battle of the Atlantic. Thirty-six Flower Corvettes were lost in World War II, half to submarines, but they helped kill over 50 U-boats.

John Lambert



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